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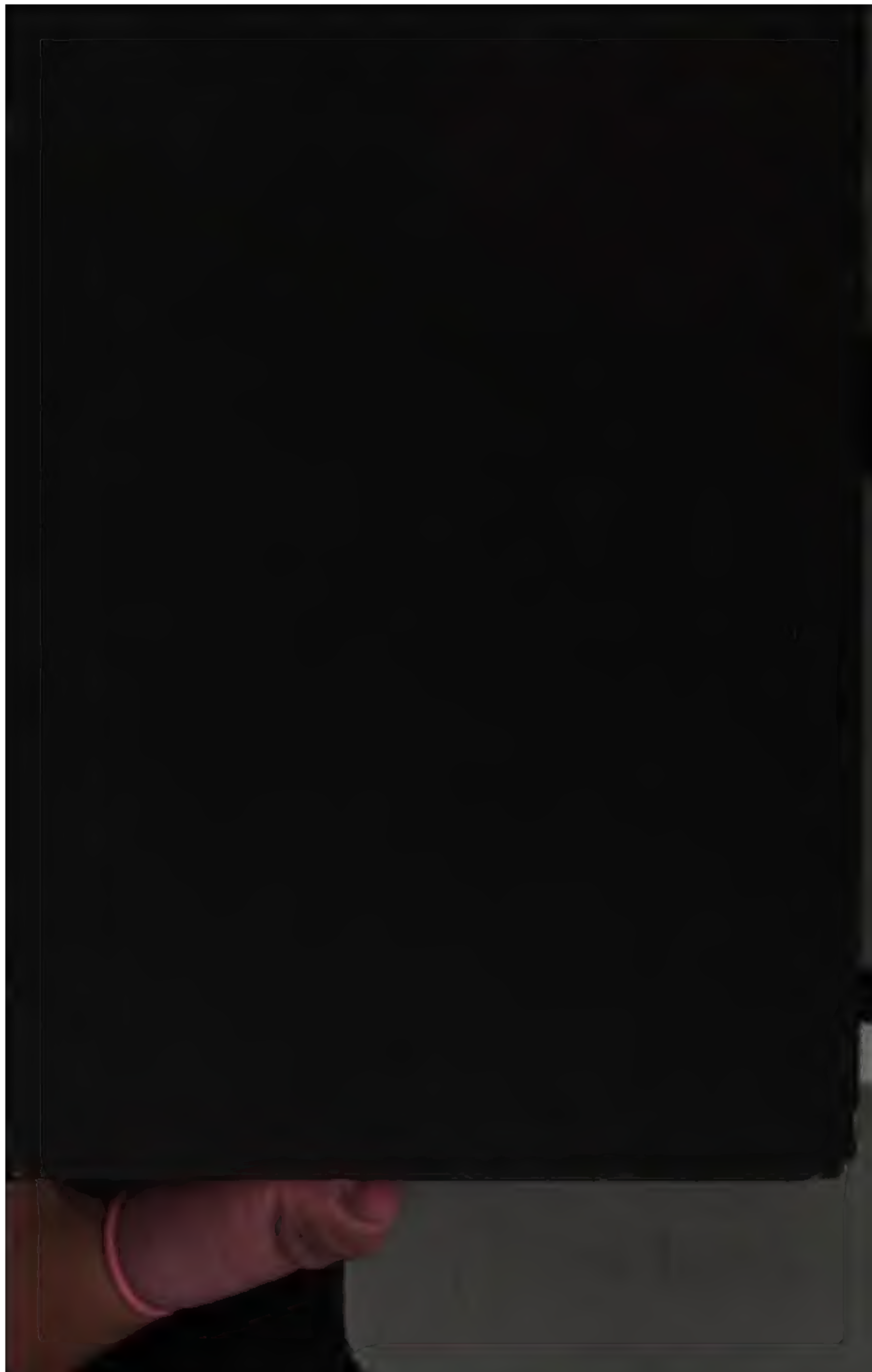
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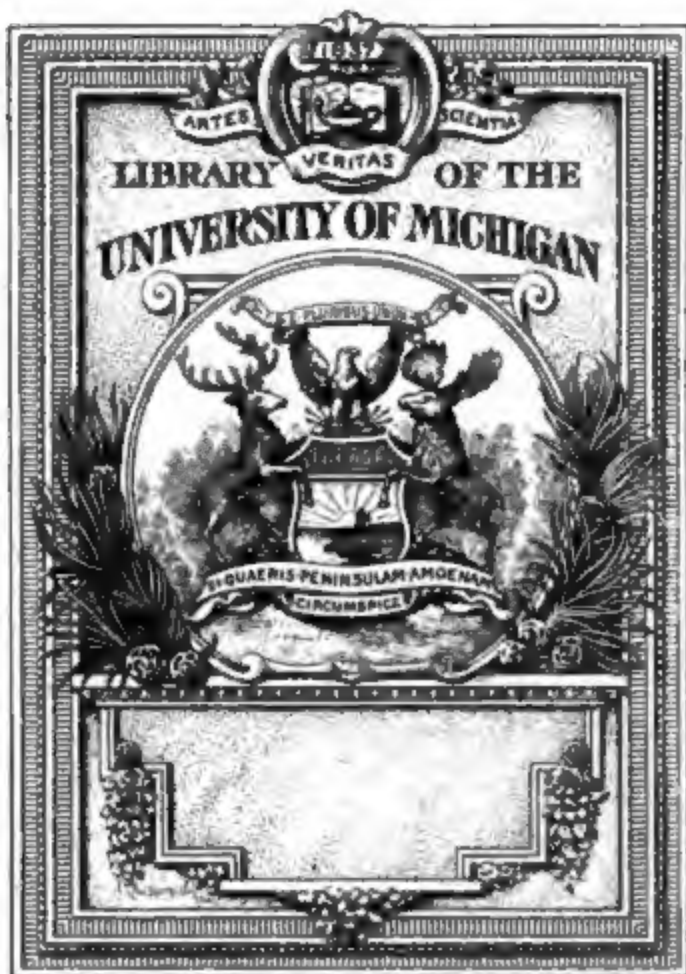
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AMERICAN ANNALS
OF
THE DEAF,

EDITED BY

EDWARD ALLEN FAY,

UNDER THE DIRECTION OF

**E. M. GALLAUDET. OF WASHINGTON. I. L. PEET.
OF NEW YORK. P. G. GILLETT. OF ILLINOIS.
J. L. NOYES. OF MINNESOTA. CAROLINE
A. YALE. OF MASSACHUSETTS. W. O.
CONNOR. OF GEORGIA. AND R.
MATHISON. OF ONTARIO.**

Executive Committee of the Convention.

VOL. XXXVI.

WASHINGTON, D. C.

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CONTENTS.

	PAGE.
The Natural Method, J. W. BLATTNER, B. A.	1
Vowel Measurements, CHARLES H. GRANDGENT, B. A.	11
Visitors and Their Views, Miss L. MOFFAT	39
Benson, WM. A. CALDWELL, M. A.	44
Dedicatory Hymn, Miss ALICE C. JENNINGS	48
Svendsen's Guide for Correcting Errors in Speech, and Report of a Journey, OLOF HANSON, M. A.	49
Table of American Schools for the Deaf, 1899, E. A. F.	54
Methods of Instruction in American Schools, E. A. F.	64
SCHOOL ITEMS: Alabama, Arkansas, California, 69; Chili, Cincinnati, Eastern Iowa, Florida, 70; Fredericton, Groningen, Halifax, 71; Horace Mann, Iowa, Kentucky, Louisiana, 72; McCowen, Manitoba, Michigan, Minnesota, Missouri, 73; National, Nebraska, North Carolina, North Dakota, Northern New York, Ontario, 74; Paris National, Pennsylvania, South Carolina, Texas, 75; Toledo, University of Deseret, Virginia, Western New York, 76, E. A. F.	69
MISCELLANEOUS: Visitors in the School-Room, 77; Cultivating the Imagination, 78; "Observations Abroad," 78; Articles in <i>Science</i> , 80; A Taste for Reading, 88; Puzzles and Jokes, 88; Report on Methods of Instruction, 88; Occupations of the Deaf, 91; Darwin on the Marriages of the Deaf, 92; How Sicard Exhibited his Pupils, 93; Laura Bridgman's Brain, 93; Translation of Bonet, 94; The De Haerne Memorial, 94; A Deaf Author, 94; The Growth and Progress of the Schools, 95; Reports, 95, E. A. F.	77
Helen Keller, EDMUND CLARENCE STEDMAN	96
Heredity in its Relation to Deafness, WM. G. JENKINS, M. A.	97
The School Museum, ANNIE MORSE	111
The Manual Alphabet in Common Schools, E. H. CURRIER and H. H. VAIL	114
A Correction, JOB WILLIAMS, L. H. D.	116
The Natural Method, J. D. KIRKHUFF, M. A.	120
A New Arithmetical Device, JAMES DENISON, M. A.	129
Convention or Association? CHARLES W. ELY, M. A.	136
Reading Before Writing, ALEXANDER GRAHAM BELL, Ph. D.	141
NOTICES OF PUBLICATIONS: Bonet's Treatise, 142; Elliott's Lessons, 143; Heidsiek's Cry of Distress, 145; Mygind's Congenital Deafness, etc., 147, E. A. F.	142
SCHOOL ITEMS: Calcutta, Chinchuba, Glasgow, 148; Halifax, Indiana, Milwaukee, 149; National, 150; New Jersey, 151; North Carolina, North Dakota, Pennsylvania Oral, St. Louis, Tung Chow, 152; Victorian, Warsaw, West Virginia, Western Pennsylvania, 153; Wisconsin, 154, E. A. F.	148
MISCELLANEOUS: Day-Schools <i>vs.</i> Institutions, 154; Education in England, 157; The Opinion of the Intelligent Deaf, 158; The Term "Combined System," 159; Deaf Pantomimists, 159; Is There a Bacillus of Deaf-Mutism? 160; The Prevention of Deafness, 161; The Twelfth Convention, 161; The Promotion of Speech, 162; The De Haerne Memorial, 162; Helen Keller, 162; Articles in <i>Science</i> , 164; Visitors in the School-Room, 169; New German Periodicals, 170; Deaf Dogs, 170; The <i>Annals</i> , 171; Erratum, 171, E. A. F.	154

	PAGE
A Voice to the Deaf.	ANNA B. BENSEL 171
Her Compensation,	JAMES BERRY BENSEL 172
Poetry as a Factor in Education,	KATHARINE FLETCHER 173
The Natural Development of Language,	P. DODDS 178
A Newspaper Relief Map,	J. D. KIRKHUFF, M. A. 182
School-Room Experiences,	SARAH TEMPLETON 185
Reading for the Little Ones,	JAMES L. SMITH, M. A. 190
A Visit to Sweden,	OLOF HANSON, M. A. 194
Benson.—II,	WILLIAM A. CALDWELL, M. A. 198
The Art of Questioning,	ELSIE M. STEINKE 206
The Early Stages in Education,	THEODORE A. KIESEL, B. Ph. 211
American Association to Promote the Teaching of Speech,	Z. F. WESTERVELT 222
SCHOOL ITEMS: Arkansas Calcutta, California, Groningen, Margate, 225; National, Nebraska, North Carolina, North Dakota, 226; Pennsylvania Oral, 227; Texas, West Virginia, Western Pennsylvania, Wisconsin, 228,	E. A. F. 225
NECROLOGY: John Carlin, 228; Claudius Forestier, 229; Wilhelmina Tredennick, 229,	E. A. F. 228
MISCELLANEOUS: Normal Training in Sweden, 230; Vatter on Heidsiek, 231; The Opinion of the Intelligent Deaf, 232; Blind and Deaf Children, 233; The Denison Fraction-Teacher, 234; The Church Mission, 235; The Mentor, 236,	E. A. F. 230
The Toy Object Method,	ESTELLA V. SUTTON 237
The Frequency and Extent of Ellipsis,	W. G. JENKINS, M. A. 243
The Value of Architectural Drawing,	ARTHUR D. BRYANT, B. Ph. 252
The Combined System of Instruction,	EDWARD M. GALLAUDET, Ph. D., LL. D. 255
The Situation in Germany,	J. HEIDSIEK 267
The English College of Teachers,	P. DODDS 271
The Columbian Exhibition,	ANGELINE FULLER FISCHER 272
First Summer Meeting of the American Association,	WM. A. CALDWELL, M. A. 274
The Whipple Method,	DAISY WAY 283
Whipple's Natural Alphabet,	ZERAH C. WHIPPLE 288
The Question of Methods in Sweden,	OLOF HANSON, M. A. 292
NOTICES OF PUBLICATIONS: Cappelli's Comedies, 295; Ferreri and Morbidi's Reading Exercises, 295; Greenberger's Word-Method, 296; Hodgson's Facts, etc., 296; Weed's Great Truths, 296,	E. A. F. 295
Mrs. Rosing's Book on Religion,	OLOF HANSON, M. A. 297
SCHOOL ITEMS: Alabama, Albany, American, Arkansas, Colorado, 298; Clarke, Cross, 299; Deseret, Florida, Georgia, 300; Illinois, Halifax, Kansas, 301; Llandaff, Maryland, Maryland Colored, Minnesota, 302; National, 303; New Jersey, North Carolina, 304; North Dakota, Northern New York, Ohio, 305; Pennsylvania Home, Rhode Island, Tennessee, Texas, Mackay, 306; Virginia, Washington State, West Virginia, Western Pennsylvania, 307; Wisconsin, 308,	E. A. F. 298
MISCELLANEOUS: An Institution at Shanghai, 308; Conventions of the Deaf, 309; The British Association, 309; International Congress of Hygiene and Demography, 310; South Australian Mission, 310; The Denison Fraction-Teacher, 310; Verrier's Hearing Tube, 311; A Blind and Deaf Poet, 311; Insanity and the Sense of Hearing, 312,	E. A. F. 308

AMERICAN ANNALS OF THE DEAF.

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THE NATURAL METHOD.

SINCE the time of Pestalozzi educators have slowly but gradually come to recognize the sequence in which the faculties of the mind are developed, and to determine the kind of material necessary in the development of each. But while respect is had to the natural evolution of these, there is yet much random work and experimenting as to methods. Modern systems of education, though not in a nebulous state, as Spencer in the ardor of an advocate maintains, have not yet reached perfection. To accept certain principles, and to devise a system that will put those principles into successful practice, are two very different things: fine-spun theories often overlook local conditions, and adventitious facts are apt to disturb the nicest calculations. That the natural order for a hearing child is to understand language before using it needs no confirmation, but how best to secure such a condition in the case of the deaf seems yet to be an open question. Dr. Alexander Graham Bell would have us return to the crude and unphilosophical methods prevailing before Pestalozzi caused the world to think: the plan of blank memorizing, suggested in his address before the Jackson Conference of Principals, is wide of the process by which the hearing come to understand language.

It is the purpose of this paper to gather up some of the principles that have become authentic, as manifested in the mental growth of the hearing, and determine how nearly they apply to the education of the deaf. It is not designed here to consider all the faculties of the mind and the manner of their development, but how best their needs may be conjointly subserved, to the end that they be prepared for mastering that higher classified knowledge which all our school curricula in a measure require. Two general topics will be considered, viz:

The manner of imparting knowledge, and the kind of knowledge to be imparted. The second is implied in the first, and will be treated but little more than incidentally.

The youthful mind seeks the simplest kind of knowledge : the powers of analysis and synthesis being little developed, it apprehends objects of thought as wholes, and takes them in singly. We to whom acquisition is comparatively easy do not always realize this : we expect too much of our pupils : we expect them to begin where we were after having acquired that vast amount of knowledge gained through the early processes of observation, induction, and analysis. They are, moreover, required with one bound to grasp the knowledge, and gain a mastery of the forms in which it is clothed. This, as Spencer tells us, is impossible. "In proportion as there is attention to the signs there must be inattention to the things signified."

The writer remembers his own experience when studying Greek and Latin. Whether the text was history or some discussion in ethics, both the facts and the language were foreign to him, and he necessarily fell into the habit of memorizing the language without having a distinct conception of the knowledge it embodied. The process was little else than a translation by rote, and the forms upon which so much labor had been expended soon dropped out of memory. Had the facts been first gained the acquisition of their symbols would have been easier and more enduring. Such is the experience of our pupils when required to learn in a similar way, except that the possibility of any benefit accruing is still more remote. Spencer's stricture of the rote-system may be paraphrased and appropriately applied here : To repeat the words correctly is everything ; to understand their meaning nothing, and thus the spirit is sacrificed to the letter. All memorizing of propositions without an understanding of them is useless : time and energy are expended thereby with no return. It is worse than useless ; it is like loading down the stomach with food which it cannot digest. Persistent indulgence in the latter brings on dyspepsia, and extended practice of the former makes the mind listless, inactive, chronically weary.

The material acquired in this way can never be used until it is indued with life : it is but as husks, burrs without chestnuts. The concepts embodied reaching not the inner consciousness of the child, all the life-giving vitality is eliminated. Husks and burrs are a poor substitute for their contents to appease

the aching void, and the forms of thought are in themselves no food for the mind. The rubbish—for so it may be justly characterized—which thus gains entrance into the mental storehouse of the child must be brushed aside; it is an obstruction rather than a help. We have all witnessed and probably experienced the propensity of a school-boy to use phraseology beyond the scope of his ideas, and we now laugh at the oft ridiculous results of such efforts, but with the deaf this propensity degenerates into a grievous habit when they “read” mechanically, picking up phraseology the thoughts of which have not been fused with their personality.

Dr. Bell is eminently correct in his premise that the natural order is to understand language before using it, but in formulating his theory for the deaf he evidently loses sight of the very important fact that children come to understand expressions by hearing them repeatedly applied. He would have the deaf worry over pages of printed characters representing things beyond the range of their observation or thought; he would accordingly reverse the natural order, for to *read* and to *memorize* is to *use* language. When a hearing child pronounces phraseology which he does not understand no benefit is derived, except such as comes from the exercise of the vocal organs; there is no intellectual gain, the words thus spoken being a mere babel, articulate yet meaningless sounds, such as are produced by a parrot. The only benefit worthy of mention is derived from observing the application of terms repeatedly heard and in turn properly using them to clothe one's own thoughts, to which there is no analogy in a deaf child's committing to memory language that he does not understand. On the one hand, intelligence is transmitted, and acquisition is involuntary; on the other hand, the material acquired adds nothing to thought, and the operation is voluntary and painful. Is there anything in common between the two processes and between their products?

The hearing learn language without much thought or effort. It requires but small ability for them to acquire the phraseology of every-day affairs and of conventional chit-chat. That the deaf may do the same we must make them thinkers; their latent powers of mind must be thoroughly awakened, developed, and strengthened, and this can only be done by making them close observers. Mere absorbing machines will never attain proficiency in speech. How shall we proceed? The

rule of Bacon is *ipsis consuescere rebus*—to accustom ourselves to things themselves. This we must observe in order to impart an intelligent notion of the forms, properties, relations, and changes of things, and of their expression in language. The pupil must acquire his elementary knowledge by direct perception of the objects themselves, and the language should not be imparted until the facts which it clothes are learned. This is the great law in the art of teaching, to which all others are subordinate.

Accuracy of thinking presupposes quite a fund of assimilated knowledge. This the memory furnishes to the imagination and to the power of comparison, from which to form new concepts. Knowledge of a permanent character is held by the mind in concepts, and in these all our thinking is done; if they are complete, as nature intends, and are held in sufficient number conception is adequate, and correct thought will follow. But the primary concepts, upon which the mind builds, must be acquired by perception: they cannot be imparted through language, nor can the mind be supposed to possess them without positive previous experience. Even the categories of thought, the truths believed to be intuitively known, are only evolved by the mind upon application. The concepts then are acquired by induction: certain attributes are seen to be possessed in common, and a class is formed, a concept evolved, to which a name is given. To teach the name before this process of induction is carried out, or to require the child to learn the name before it is applied to a number of individual facts belonging to the class, is reversing the order of nature. It is often taken for granted that the process of induction has been accomplished, and the term is consequently given: but even in such a case a child is not always competent to identify the term with the concept, except by direct application.

Language serves to awaken the remembrance of images gained by observation, or, by analogy to those already in possession, to form new images: but to do the latter the knowledge previously acquired must be considerable, and the powers of comparison and judgment must be pretty well developed, or the result is as crude as the product of the cliff dweller's efforts at art. The mind refers the concept to an individual fact for verification: where the power to generalize is little developed, the tendency is to individualize general notions by clothing them with the attributes of particular facts known.

whether they be entirely appropriate or not. Noah Porter very aptly speaks of this in his "Intellectual Science :"

Every man imagines the concepts which he employs or hears of by examples that are peculiar to himself, and which are derived from his individual experience or observation. An Esquimaux, a Chinese, and a European would picture very different objects to the imagination on hearing or reading the word state, legislation, wealth, money, wages, civilization, fashion ; and even the more concrete terms, house, city, ship, oar, sail, knife, feast, procession, township, and meadow.

The insufficiency of mere language is further apparent from its failure to give even those possessed of varied and extensive knowledge, whose minds have grasped most complicated concepts, a clear and full impression of a scene in nature. How meagre must be the ideas received from Mark Twain's inimitable description of the Alpine scenery when compared with those of one who is permitted to "dwell beneath the avalanche !" How far short of the reality are the notions afforded by Longfellow's beautiful poem, "Sunset on the Hills," or St. Mark's terse but pointed account of the "Transfiguration," or Victor Hugo's masterly description of the battle of Waterloo ! The writer once witnessed a scene in the Rocky Mountains that he will never forget. The light of the sun pierced a huge rift in the rocks, was refracted through a cloud, and thrown back upon the mountain. What with the green background and the outlines of brilliant and variegated colors, the image carried away from the scene is one to which that produced upon the mind by the most graphic and complete description of which language is capable would be but as a shadow. Thus it is with many facts, both abstract and concrete, of which one has had no direct or analogous experience ; language can do them but feeble justice. An Indian inhabiting the wilds of the West all his life would receive from a description but an indifferent image of the varied phases of city life ; a native of Congo would have no notion worthy the name of the grand aspect presented by a locomotive and a train of cars ; a Russian or a Chinaman, subject to despotism, would obtain rather an indefinite idea of American institutions. But we need not go to the barbarous or the half-civilized for examples similar to the last named. The civil institutions of England are much like our own, yet not infrequently great ignorance of American institutions is manifested by English papers and Englishmen of note. Is it not evident, therefore, that a child just acquiring

the rudiments of knowledge can hardly gain, through an unaccustomed medium, any correct idea of distant things, and is the plan not unwise which requires that a child so conditioned shall deal with scenes, events, transactions, and customs remote both in time and place?

Porter says again: "When I pronounce such words as *white*, *red*, *sweet*, *sour*, etc., I presuppose that the person to whom I address them has known by experience, *i. e.*, by intuition, what they signify. If he has had no intuition or analogous experience of them my words convey to him no meaning." The notions of color, of form, of number, of comparative size, of absolute and comparative weight, of relationship in position, etc., and the judgment which affirms them of objects, are developed by observation or by the use of sufficient data to make them correct. These are the material for primary instruction; only from them as a basis can the work extend to the abstract and the more remote. To close this part of the discussion with a few anecdotes may not come amiss.

The writer recently happened upon a series of mathematical deductions based upon a proposition in Euclid, but as there was not a copy of Euclid at hand to enable him to trace the reasoning from its source he was lost in a maze of unintelligible predication; though understanding the individual words, he had but a slight conception of what their relation affirmed. This recalled the case of a deaf boy who had come under his observation. The boy never advanced much beyond the ability to recognize individual words. He would often take a paper and run his finger along the lines to find words he knew, and this he called reading.

A successful teacher once told the writer of a girl who was in the habit of memorizing her lessons with no conception of their meaning. She had reduced the process to an art, so that she would come to her recitation without the omission of a word, syllable, or punctuation mark. To determine the extent to which she would carry her art the teacher one evening gave her a lesson in a French book to "learn." Upon entering the school-room the next morning she was asked whether she knew her lesson and replied that she did. The teacher then had her close the book and write what she had learned. The passage assigned was reproduced verbatim, with its peculiar French elisions, apostrophes, and accents. This girl had been started

by the rote-system. Concentration of thought had never been developed in her, and she did not know how to study.

These two are, of course, extreme cases, but it is probable that all pupils who are given the task of acquiring, through a medium almost as strange to them as French, knowledge of facts of which they have had no direct or analogous experience will act in a somewhat similar manner. The operation in the majority of cases is easily analyzed: recognition of individual words and blank memorizing. Any probable digression is necessarily in the direction of simple imagination, to which Porter refers when he says, "Children when left to themselves group together objects in singular combinations and discern resemblances between things which older people would never think of connecting."

The statement made by a recent writer in the *Annals* that the deaf are wanting in imagination seems erroneous. The lack of confidence and the suspicion attributed to them, if true, is rather an indication of too much imagination. The law is that the quantum of imagination, aside from natural constitution, and within certain limits, is inversely as information, or, in other words, as the latter increases the former becomes less intense, absorbent, and exclusive. When the information is meagre the mind is necessitated to combine the few facts of perception known in consciousness and their elements to furnish it with new materials for thought. It is well known that no other class of intelligent beings can produce specimens of equal age possessed of a smaller aggregate of facts, and a narrower range of accurate concepts than the uneducated deaf. The conclusion is that their imagination is more active, in proportion, than that of hearing children of the same age. The system of education, therefore, which has for a primary aim the development of their imagination is erroneous; it seeks to stimulate what is already possessed in superabundance, and what, in the economy of the mind at that stage of its development, acts spontaneously and persistently..

This is shown by the waywardness of the child's mind. Locke says, "He that will observe children will find that, even when they endeavor their utmost, they cannot keep their minds from straggling." Of no children, regarded as mentally sound, is this more true than of the deaf. Directly a fact is presented to them, their minds are impelled from the object of attention to seek, through a natural obedience to the law of

association, to form new combinations, and they need constantly to be recalled from their wanderings. From the very condition of things such combinations are often exaggerated, grotesque, and false. Present knowledge by means of its symbols to a person whose perceptive faculties are untrained, and whose acquired facts are few, and misconception will often follow : the imagination proceeds to make use of the few facts known in consciousness as a basis of combination, and the knowledge is apt to lose its identity in the child's mind, the elements of the combination and also their relation not being identical with the original.

To endeavor, then, to use the imagination of a child primarily as a reliable instrument of education is unphilosophical and illogical : it is beginning at the wrong end, and the more this is done the less competent will the child be for applying itself to the work of gaining knowledge. There is absolutely no need of paying any attention to the imagination until there is a preponderance of knowledge obtained through perception. Not only is the imagination sufficient at this stage, but the natural tendency is to further develop a faculty whose exercise is easy and agreeable, to the neglect of those whose exercise is attended with effort and pain. Sir William Hamilton says :

As the exercise of a power is the only means by which it is invigorated, but as, at the same time, this exercise, until the development be accomplished, elicits imperfect, and therefore painful, or at least less pleasurable, energy, it follows that those faculties which stand the most in need of cultivation are precisely those which the least secure it : while, on the contrary, those which are already more fully developed are precisely those which present the strongest inducements for their still higher invigoration.

This needs no comment : our own experience verifies it. To tax the faculties beyond their tendency to spontaneous energy, moreover, renders their exercise painful, and jades the mind. Such is often the case with those methods, whether they comprise the use of signs, written or spelled characters, or books, which seek to impart knowledge indirectly. The imagination is appealed to, while the native force of the mind must be expended upon attention, imagination, and reason together, and the result is weariness, disgust, and neglect of attention.

The suggestion is incorrect that by object teaching, by presenting materials for thought directly to the mind, the imagination is not exercised, and receives no impulse. The very

materials with which it deals are the products of perception, and the more of such materials it has, the more reliable it becomes, the less liable it is to lead the mind into error. That its work may be more than a mere fantasy, that it be not a fine or a rude frenzy, nor exerted in the borderland to nothingness—unsubstantial dreams—it needs a broad basis of reality. “He who has imagination without learning has wings and no feet,” and as long as we are created to move and have our being upon *terra firma* we have less need of wings than of feet.

To summarize briefly, the natural order of imparting knowledge is from the near and observed to the distant; from the known to the unknown; from the simple to the complicated; and the notion should precede or go with the term.

We come now to a discussion of the practical. How shall we teach the elements of language? A careful study of all the mental energies engaged in the act of acquiring points us to action-writing and object lessons. These please the child and fix his attention; the ideas are first made his own property and he can then give his entire attention to their expression. By bringing the degree of attention required within his capacity we induce him to exercise that power, and thus it can be gradually strengthened; the rote-system distracts the attention and virtually prevents its exercise, *pluribus intentus minor est ad singula sensus*.

Writing fixes in the memory the forms of speech more accurately and more permanently than reading. The power of recollection is thereby constantly exercised; the mind is active instead of being merely receptive. That is the mental state needed. Says Wayland in his *Intellectual Philosophy*: “The control of the will over our faculties is much assisted by the use of the pen.” Facility of speech can only be gained by actual use. Ready and accurate talkers or writers have acquired their proficiency by practice.

The ability to understand language does not always imply a ready command of it. The writer has a smattering of several foreign tongues, so that he can understand an ordinary conversation in them, but an attempt on his part to speak them would be attended with stammering and inaccuracies. In order that he may learn to speak any one of these languages correctly and fluently he must practise the moulding of his own thoughts in its forms. This is the plan by which foreign lan-

guages are taught in advanced modern schools, and if we depart from it with the deaf we take a step backward. Our pupils should accordingly be made *to write from the very beginning*. Their frequent mistakes ought not to deter us. Hearing children, just beginning to talk, make mistakes: their speech is often fragmentary and incoherent, and their efforts to express themselves are sometimes painful, yet we encourage those efforts. We shower words at the ears of children for two years, says Dr. Bell, before we expect them to turn around and talk to us, but it does not follow that they recognize the application of words any considerable time before endeavoring to express their wants in them. Moreover, our pupils, coming to us at the age of eight or ten, cannot be regarded as on a level with a child in the cradle; their minds are already awakened and they have the power in a measure to associate words with ideas.

Let us then require our pupils to write constantly, commencing with the simplest forms and advancing systematically to the more difficult. As materials for the work, let us introduce into the school-room all the ordinary physical acts and common transactions of life practicable, demonstrating, also, with the objects about us, their attributes and relations. When the pupils have advanced into geography and history let us show them vegetable and mineral products, describing their uses; illustrate the physical aspects of a country with sand-tables, diagrams, and pictures; have battles; hold elections, courts, legislatures, inaugurations, etc. They will thus go out into the world with some definite knowledge of it, and with the ability to express what they know.

There is, however, no desire here to discourage the reading habit, for on that mainly depends the advancement of the deaf after their school years are over, but they should first be given narrations of local occurrences which they have witnessed, or with which they are thoroughly acquainted. Following are two reading lessons prepared by one of our teachers, and printed upon slips of paper, for a primary class:

I.

Mr. Spain is very tall. He has a black coat and vest. He sleeps in a small room in the boys' dormitory.

The little boys sweep the yard. They pick up papers. They put them into the wheelbarrow. They fill the wheelbarrow with the papers. They throw the papers out of the wheelbarrow. Many boys play near

the wood-pile. Willie may play with sticks and stones, and pieces of glass.

Mr. Turner has a little colt. The colt is very pretty.

Willie Yeker carried a handful of stones into the school-room. He put them on a desk.

II.

Charlie Harrison took off his coat. He hung it on a small tree. A cow saw the coat. She wanted it. She pulled it from the tree, and ate part of it. It was Charlie's new coat. He has no new coat now. He has an old one. Some boys laughed at Charlie. He cried. He wants a new coat. Mr. Taylor will write to his father. His father will get a new coat for him.

These are given as samples ; they are better for the pupils of that particular class than any primary book published, because the facts bring the language home to them. When the force and meaning of certain expressions are once understood they can be applied to things and occurrences at a distance, but not until a considerable fund of them are mastered can general reading be made profitable. We should teach our pupils language, so that they may be able to read intelligently, and so that they *will* read.

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VOWEL MEASUREMENTS.

[THIS article is reprinted, by permission, from the *Publications of the Modern Language Association of America*, 1890, in the hope that our articulation teachers may find it suggestive and useful in their work, and that they may be induced to make investigations of their own in the same direction, and thus contribute something of value to the general stock of phonetic knowledge.—E. A. F.]

In a paper addressed to linguists and phoneticians it were superfluous to dwell upon the importance of phonetics. All scholars interested in philological research or in modern language instruction must be aware that the teaching of living tongues is greatly improved by a knowledge of phonetics, and that without this science the satisfactory pursuit of comparative philology is impossible. Whatever be the system we adopt in the French and German courses of our colleges and schools, we must admit that pronunciation is an essential element ; and the intelligent teaching of pronunciation demands an acquaintance with the physical action by which the sounds of human

speech are created and modified. The American teacher, if he have exceptional advantages and an unusually delicate ear, may perhaps be able by mere imitation to acquire a correct foreign accent himself, but neither he nor the foreigner can ever, without a knowledge of phonetics, tell his pupils how to reproduce it. As for the science which we commonly call philology, it consists mainly of the study of sound-changes; and the only solid foundation for such study is, obviously, a thorough mastery of the principles of sound-production.

Knowing these things, we cannot but regret that such an important branch of learning is, in spite of the wonderful achievements of a few investigators, neither widely pursued nor firmly established. In fact, much remains to be done before phonetics, as a whole, can be acceptably presented to the public. This being the case, is it not the duty of every one concerned with philology to do his share toward the development of the parent science? It seems to me that it is, and that belief has impelled me to contribute my mite to the neglected cause.

Before entering on a course of original research, one naturally makes the practical inquiry: Which part of the subject is in greatest need of more light? In respect to phonetics this question is easily answered: what we most want is accurate information concerning the pronunciation of vowels. The acoustic relations of both vowels and consonants have been thoroughly studied; and, although the reports of various experts disagree, we know as much about this topic as is necessary for philological or pedagogical purposes. Phoneticians are, in the main, agreed as to the formation of the consonants; some matters, such as the tongue-positions for *s* and *sh*, are not quite clear; but in most cases tongue-painting has furnished us with conclusive evidence.* With regard to the vowels, however, there is, owing to our imperfect knowledge of the subject, a sad lack of harmony. Admirable work has been done by several men; without their studies such further investigation as I am about to propose would be inconceivable; and if they have failed to convince the learned world, or even fully to agree among themselves, it is perhaps because they and their followers have had to contend with three drawbacks. In the first place, being so few, instead of confining themselves to their own dialects, they felt obliged to attempt the analysis of a host of foreign sounds, many of which must inevitably have been ill pronounced. This

* See Techmer, *Internationale Zeitschrift*, i, 1, Tab. iv.

broad method was doubtless necessary at first: but, thanks to the results obtained by it, we can now demand something more precise. Secondly, they adopted, in general, no system of real measurement, but trusted mainly to sensation and to ocular observation. Now there are very few vowels during the emission of which we can look well into the mouth through its normal aperture; and if we lower the jaw more than usual, we cannot utter the sounds in a natural way.* For most vowels, then, mere ocular examination is an unsafe guide. Still more uncertain is sensation; for feeling depends far less on the actual movements of the organs than on the preconceived idea in the observer's mind.† So far as I know, the only actual measurements of any importance made hitherto are those of Merkel;‡ and even his are really systematic and trustworthy only for the movements of the jaw. The third hindrance to which I referred is the wellnigh irresistible tendency to construct theories on insufficient data. Many investigators have, I fear, designed their system first, and then pared off the toes and heels of their facts to make them fit the symmetrical slipper into which they were to be thrust. It should, nevertheless, be said that the systematizing tendency has brought forth good as well as evil; for without it we should scarcely have seen that scheme of vowel-classification which has made modern phonetics possible.

If, then, we wish to improve on the work done hitherto, we must observe these four rules: begin your examination with a

* See an article by Professor Sheldon and myself, called "Phonetic Compensations," in *Mod. Lang. Notes*, III, 6. This kind of compensation is, I think, illustrated in the chart that accompanies Dr. Techmer's pamphlet, "Zur Veranschaulichung der Lautbildung" (Barth, Leipzig, 1885): if I remember his pronunciation rightly, the author forms *a*, as I do, with the tongue lying nearly flat in the bottom of the mouth; but in the drawing, which represents a man uttering *a* with his mouth stretched open to its widest extent, the middle of the tongue is violently raised, evidently to compensate for the enlargement of the mouth-cavity through unnatural jaw-lowering. Similar compensations are to be noted in *Phonetische Studien*, II, 2, "On the Bell Vowel-System."

† How far a really good observer may be led astray by "sensation" is sadly apparent in some parts of the article "On the Bell Vowel-System," by the late W. R. Evans, *Phonetische Studien*, ii, I.

‡ See "Physiologie der menschlichen Sprache," 1866, pp. 68, 82, 85, 86, 89, 91, 93, 98, 103. See also, however, Vietor, "Phonetik," 1887, p. 36; and Brücke, "Grundzüge der Physiologie und Systematik der Sprachlaute," 1876, pp. 37, 38.

mind free from all prejudice; restrict yourself, in your publication of positive results, to your own dialect or to one with which you are equally familiar;* make no unqualified statement that is not based on careful measurement; conduct your investigations in such a way as not to interfere with the natural utterance of your sounds.

For several years I have been pursuing a series of experiments with a view to ascertaining the best method of vowel-measurement, and I have finally hit upon one that seems to promise good results. I offer it to my fellow-workers such as it is, hoping that, bettered by their criticism, it may prove useful to other investigators.

The subjects of my research are the principal vowels of my native Boston dialect, as I pronounce them in careless speech.

They are:

1. \bar{u} : † as in "boot," "suit." I measure the second half of the vowel, which is somewhat more rounded than the first. The latter part of my \bar{u} sounds nearly like German u in *gut* and French *ou* in *doute*, but it has less energetic lip rounding, and seems to be pronounced a little further forward in the mouth.

2. \bar{u} : the vowel in "bull," "hoof." It regularly takes the place of \bar{u} before any sound written r or er , as in "doer," "endure," "insurance," "newer," "poor." A variety of \bar{u} regularly precedes \bar{u} when that vowel is final or followed by a voiced consonant, as in "do," "room," "rude," "rule," "through" (pronounced $d\bar{u}\bar{u}$, $r\bar{u}\bar{u}m$, etc.).

3. \bar{o} : as in "boat," "note." I measure the second half, the first half being less rounded.‡ The latter part of my \bar{o} is very similar in sound to German o in *not* and French \acute{o} in *côte*.

4. \hat{a} : as in "all," "bought," "daughter," "for," "law;" somewhat similar in sound to French o in *tort*, but with less lowering of the jaw and no real rounding.

5. o : the vowel called (when heard in such words as "boat,"

* In *Phonetische Studien*, iii, p. 114, Sweet says: "The only observations that can be fully relied on are those made by trained observers on themselves."

† The "long" and "short" marks are used in this article merely to distinguish different vowel-qualities: they have no reference to quantity. The correspondence of my symbols with those used by the American Dialect Society is as follows: my \bar{u} = Am. Dial. Soc. \hat{u} , \bar{u} = u , \bar{o} = \hat{o} , \hat{a} = \hat{a} , o = \acute{o} , u = u , \bar{e} = \bar{e} , \bar{o} = o , a = a , e = \acute{e} , i = i , \bar{i} = i , \acute{e} = \acute{e} , \bar{e} = e , \hat{a} = \hat{a} .

‡ See Sweet, "Primer of Phonetics," 1890, p. 75.

"road," "stone") "short New England o." In my dialect, however, it exists only in the following cases: first, in the word "whole" and its compounds; second, in the diphthong *oē* in "boy," "moist," etc.; third, instead of *ō* before any sound written *r* or *er* (as in "door," "roaring," "slower," "store"); fourth, in unaccented syllables of some words oftener seen than heard (as "phonetic" = *fonētik*, "November" = *novēmbe*; but "polite" = *pelaīt*). A sound intermediate between *ō* and *o* regularly precedes *ō* when that vowel is final or followed by a voiced consonant, as in "bowl," "home," "road," "so" (pronounced *boōl*, *hoōm*, etc.). My *o* seems somewhat similar to French *o* in *bonne*, *botte*, *homme*, *poli*, but is apparently pronounced further back in the mouth.

6. *u*: as in "but," "come," "enough," "squirrel," and sometimes in "got," "what." It is also the vowel that takes the place of an *r* (except *r* between spoken vowels) or final *-er*, after *ū*, *ī*, and *o* (as in "sure" or "shoer," "nor" or "gnawer," "sore" or "sewer": pronounced *shūu*, *nūu*, *sou*).

7. *ē*: as in "bird," "nerve," "nurse," "pearl," "sir."

8. *ō*: as in "hot," "John," "to-morrow." My *ō* is unrounded, and hence unlike that of Sweet and of some Americans, from which it seems to differ also in other respects. When pronounced with the mouth very wide open, it sounds strikingly like French *ā* in *pâte*.*

9. *a*: as in "ask," "far," "father," "hard," "pass," "quarrel," and sometimes in "got," "what." A forward variety of it forms the first element of *ai* (as in "I," "die," "eye," "height," "light"); a slightly retracted variety forms the first element of *au* (as in "cow," "out," "plough").

10. *e*: the unaccented vowel in "again," "better," "ogre," "sofa." It takes the place of an *r* (except *r* between spoken vowels) or final *-er*, after *i* and *ē* (as in "dear," "payer," "there": pronounced *die pēe*, etc.).

11. *i*: as in "eat," "feet," "receipt," "suite." I measure the second half of the vowel: the first half tends slightly towards *i*.

12. *ī*: as in "beard," "Erie," "fit," "merely," "near," "steer," "win." An *ī* that tends somewhat towards *i* regularly precedes final *i* and *i* before a voiced consonant, as in "fee," "feed" (pronounced *fīi*, *fīid*.) When *ī* is unaccented, as in the last syllable of *sītī* ("city") or *nēkid* ("naked"), it is slightly flattened and

* See *Phonetische Studien*, i, 2, p. 171; and Sweet, "Primer of Phonetics," 1890, pp. 76 and 85.

retracted, approaching *é* in sound. Compare Sweet's "Primer of Phonetics," pages 15, 74, and 77.

13. *é* : as in "fate," "great," "straight." I measure the second half; the first half tends slightly toward *è*.

14. *ē* : as in "bet," "fare," "mayor," "men," "stair," "tear," "their," "where." A variety of this *ē* regularly precedes final *é* and *é* before a voiced consonant, as in "afraid," "bathe," "blaze," "name," "rail," "rain," "say," "they," "weigh" (pronounced *efrē'd*, etc.). Compare Sweet's "Primer of Phonetics," page 74.

15. *ā* : as in "cat," "man."

These fifteen vowels, then, are to be analyzed. What are the organs whose positions we must determine? The raw material of all spoken vowels is, as every one knows, the sound borne in the vibrating breath that rises from the larynx. This sound passes, on its way to the outer air, through a large resonance-chamber and a comparatively small orifice. Sometimes there are two spaces and two openings. What we must ascertain for every vowel is the size, shape, and place both of the cavity or cavities and of the narrow passage or passages. These factors are determined by the form and position of the lips, jaw, tongue, epiglottis, and soft palate. If the larynx perceptibly rises and falls as we go from one vowel to another, its movement must change the dimensions of the pharynx, and should therefore be noted also.* In my case, however, this motion of the larynx is altogether too slight to be measured. The protrusion and retraction of the hyoid bone are connected with the movements of the tongue, and need not be separately studied.† There remain, then, the five organs just enumerated, whose changes of shape and location we must carefully examine.

The easiest measurements are, obviously, those of the lips and jaw: with these we shall begin. In performing the following experiments it is of the greatest importance to pronounce the vowels naturally. It is perhaps best to look away for a few moments from the mirror before which all these investigations must be pursued, and speak over and over again a common word containing the desired vowel: then, by glanc-

*Merkel "Physiologie der menschlichen Sprache," p. 103) notes a very decided rise and fall of the larynx. Techmer *Internationale Zeitschrift*, i. I, Tab. iii indicates something similar.

† See *Mod. Lang. Notes*, III, 6, p. 364.

ing suddenly back at the glass, the real lip-position can be caught. To draw the outlines of the lips correctly, four measurements, which can be taken with a slip of paper, will probably be found necessary—those marked in Figure 1* AD, and BC, *ad*, and *bc*. The rest can be drawn free-hand. I give figures showing the lip-positions for all my vowels. It will be seen that the general outlines are always the same: this is, I think, a characteristic feature of English vowels. My *û*, *ô*, *ü*, *o*, and *ê* are rounded.

The jaw-lowering can be noted by a simple device. On a strip of pasteboard, an inch long by a quarter of an inch wide, is marked a scale of millimeters, with the zero at the bottom. This scale is glued, in a vertical position, to the most prominent part of the chin. A slender stick, about a foot long, is then suspended from the upper part of the face in such a manner that it will hang alongside the pasteboard. The stick is held steady at the lower end by the hand of the experimenter, who now fastens a little pointer to it at such a spot that when the jaws are firmly closed it will be just opposite the zero. This being done, the vowels are pronounced, and the pointer indicates in millimeters the amount of jaw-lowering. The measurements for my vowels are given in the drawings at the end of this article. It is worthy of note that the difference in mouth-opening between my closest and my widest vowels does not exceed four millimeters. In French and German the difference is, of course, far greater.†

We next come to the difficult subject of palate and tongue. Here the greatest drawback is the unwillingness of the organs to perform their natural functions when in contact with any foreign substance. Only by long and patient practice can the rebellious tongue and palate be entirely subjected to their owner's will. It can, however, be done. In the course of varied experiments I have gained sufficient mastery over these sensitive organs to make, at will, either of them assume the correct position for any vowel in my dialect, and retain that position in spite of the presence of a finger or an instrument. Before be-

* See end of this article.

† Merkel ("Physiologie der menschlichen Sprache," p. 103) makes the difference between *i* and *ä* 7". Passy (*Phonetische Studien*, i. I, p. 24) gives diagrams which seem to indicate a little more jaw-lowering. Western ("Englische Lautlehre," 1885, pp. 5 and 83) implies that the distinction between *i* and *ä* is almost entirely a matter of jaw-position.

ginning any systematic measurements it is well thoroughly to explore with the finger all parts of the mouth and as much as possible of the pharynx, with a view both to training and hardening the organs, and to gaining a general knowledge of the movements of tongue and palate. Much can be learned in this way; in fact, for some measurements I have discovered no better method.* Before long it will be found expedient to pronounce the sounds mentally rather than aloud; for when the organs are in the proper position for a vowel, the presence of a finger in the mouth of course diminishes the size of the resonance-chamber and so alters the sound; and the observer, catching this false note, involuntarily shifts his tongue. A helpful instrument in all these researches is a tiny electric light that can be held in the mouth.† With the aid of this burner the outline of the tongue from side to side can be observed from the mouth-aperture, and can be drawn with sufficient accuracy free-hand. Drawings of these outlines for my vowels accompany the representations of lip positions and longitudinal tongue-profiles at the end of this paper. Those for *i*, *ĩ*, *é*, *ẽ*, and *ã* were made with the head thrown back, and represent the passage between the front part of the tongue and the roots of the teeth; the others represent the highest part of the tongue that can be seen, and the section of the palate that is over it.

For our main investigations the starting-point must be the upper teeth and the hard palate. The first thing to be done is to make an outline drawing of the whole palate from front to back. A cast of the immovable hard palate can be obtained from a dentist, or constructed by the observer himself from a pulp made of tissue paper. After having carefully measured in the mouth the distance (Figure 2, *bc*) from the lower edge of the upper front teeth to the middle of the arch that forms the inner limit of the hard palate, we can take the front part of our outline from the cast. The drawing should include a cross-section of one of the upper front teeth. The back por-

* In his introduction to the *Revue des patois gallo-romans*, i, I, the Abbé Rousselot says, in the course of an "Analyse des sons," in speaking of the vowels (p. 13): "Je ne tiendrai compte ici que des mouvements de la langue et de ceux des lèvres. L'explorateur que j'emploie est tout simplement le doigt."

† I have made use of a small glass bulb enclosing a one-candle-power incandescent burner connected by two thin wires with a three-cell battery.

tion of our line, consisting of the profile of the soft palate, will vary with the different vowels. For every vowel it is best to make several measurements. If we look into the widely-opened mouth, we see that the way into the pharynx leads through a double arch, broken at the top; from the centre of this arch hangs the uvula. After setting the soft palate in the correct position for the vowel,* we take a long, narrow strip of wood, and measure the distance from the edge of the upper front teeth, first to the inner (bf'), next to the outer (be) pharyngeal arch, and then to a point half-way between the outer pharyngeal and the palatal arches (bd , Figure 2).† These points being fixed, we can draw the outline of the soft palate. To complete the drawing (Cf. Figure 2), a section of the lower front teeth should be added in the proper position. The lips may, if desired, be outlined also.

Such a drawing as this having been prepared for every one of the fifteen vowels, we can now proceed to the tongue-measurements. For these I have constructed a set of instruments consisting of card-board ovals varying in length from five to twenty-five millimeters, each of which is firmly fastened to a piece of pliable silver wire about six inches long, which projects at right angles from the centre of the ellipse. The observer sits at his desk with the proper drawing before him, and with pencil, mirror, and instruments at hand. He selects the largest instrument that can, so far as he is able to judge, be used for the vowel in question; bends the wire so that it will hold the upright oval as nearly as possible at right angles to the tongue; places the card-board at the very back of the wide-open mouth; then raises the jaw, and, while pronouncing the vowel naturally, pulls the oval forward until it touches simultaneously the palate and the tongue.‡ Thereupon he

* The soft palate can readily be trained to take the proper positions. It is well to begin by watching its movements in natural speech, and then to try holding the tongue down with the finger and uttering the vowels mentally. Before long the tongue will stay down of its own accord, and the soft palate will move independently of it.

† For the sake of greater accuracy (as these data are of the highest importance), we may make some supplementary measurements. Open the mouth wide: determine the exact position of a (Figure 2) with reference to b ; then measure af . The positions of a and b , and the distances ab , af , and bf being known, we can find the exact location of f . Similarly we can, if necessary, calculate the positions of e and d .

‡ Great care should be taken, especially in measuring i , $ɪ$, $ē$, and $é$, lest the card-board sink into the back of the tongue and thus indicate a false

stops, marks with his thumb-nail the point of the wire that is in contact with the lower edge of the upper front teeth, and then takes the instrument from his mouth and applies it immediately to his drawing, being very careful not to bend the wire. When the instrument occupies on the drawing a place exactly similar to that which it held in the mouth, the top of the ellipse being opposite the palate line, he marks with a dot on the paper the position of the lower end of the oval, thus indicating the point where it rested on the tongue. After that, he takes the next smaller instrument, performs the same experiment, and makes another dot; and so on, until all the available instruments have been used. Then he changes the process, beginning at the big cavity just behind the roots of the teeth, and moving the instruments both backward and forward. For some vowels, of course, he will find that only one of these two sets of measurements will be possible. Finally, by connecting all the dots he has made on the paper, he obtains the longitudinal profile of the tongue for the desired vowel. The shape of the root of the tongue, the size of the pocket between it and the epiglottis, and also the distances between the raised edge of the epiglottis and the back of the tongue on the one hand, and the inner wall of the pharynx on the other, can best be ascertained with the finger.* When these distances are considerable, I have found it a good plan to swing the end of the finger gently from one object to the other, to continue this movement until it becomes, so to speak, habitual, and then, on taking the finger out, to reproduce the swing before a ruler or on the drawing. In this way a tolerably reliable measurement can be made.

The drawings obtained by these methods form the last and the most important portion of this contribution. I would call attention to the fact that the large figures represent a section of the *middle* of the mouth—that is, the highest part of the palate, the lowest part of the central groove in the tongue, the greatest approximation of the front teeth, and the widest lip-opening. The uvula has been omitted. It must be remem-

position. If this digging into the tongue cannot be avoided, some allowance must be made for it. Much care is required, also, to keep the oval perpendicular to the tongue.

* To admit the finger the mouth must, of course, be opened wider than usual; but this jaw-lowering, which amounts to three-quarters of an inch at the teeth, is far less perceptible at the back of the mouth.

bered, too, that if the jaw be abnormally lowered, the tongue will be correspondingly raised; hence observers looking into their mouths will not be able to see all the tongue-positions as they are depicted here. Students of phonetics will observe that in my dialect there is nothing corresponding to Sweet's definitions of "narrow" and "wide."* I have no doubt that such a distinction exists in the speech of some persons; I can, if I try, make something like it myself for *i* and *ĩ*, *é* and *ẽ*;† but it does not seem to be my natural way of creating a difference between "close" and "open" sounds.

My *a*, *õ*, and *ẽ* are also widely different from Sweet's descriptions;‡ my *u* is probably ‡ pronounced further forward; I have not, to the best of my knowledge, his "narrow" *æ* (a vowel between *ẽ* and *ä*), although I often hear it from Americans. My drawings show, further, that most pictures of the tongue-positions for *i*, *ĩ*, *é*, *ẽ*, and *ä* represent the tongue as extending too far back; it really descends sharply just behind the highest point, leaving in the back of the mouth a very big chamber, which seems to be the distinguishing feature of "front" vowels.§ This chamber is, in the case of *i*, *ĩ*, and *é*, connected with the outer air by a long, narrow passage; but for *ẽ* and *ä* the space before the tongue is so widened as to lose its tunnel-like character. *U*, *ũ*, *õ*, and *ä* have their principal mouth-cavity in front of the highest part of the tongue: we may, then, aptly call them "back-vowels." My "front" and "back" vowels form two nearly parallel and vertical series. In the case of *õ*, *a*, *e*, *o*, *u*, and *ẽ*, the mouth-chamber is above the whole tongue; but while *õ*, *a*, and *e* leave the tongue almost perfectly flat, *o*, *u*, and *ẽ* require a hump in some part of it. The elevation for *ẽ* seems to be thinner from front to back, and the tongue less retracted, than for *u* and for *o*, which latter vowel

* My drawings appear to show a regular gradation from *ä* to *i* and from *ä* to *ũ*; nearly all German phoneticians have maintained that this was the case with their vowels.

† See Jespersen, "Articulations of Speech Sounds," 1889, p. 17. Sweet himself says, "Primer of Phonetics," 1890, p. 18: "The distinction between narrow and wide is not so clear in the back vowels."

‡ Sweet: "Handbook of Phonetics," 1877, p. 16; "History of English Sounds," 1888, p. 3; "Primer of Phonetics," 1890, pp. 21, 72, 73. In the last work, p. 72, Sweet says of his "mid-back-narrow" *u*: "This vowel is slightly advanced."

§ See *Proceedings of the American Philological Society* for 1884, pp. xxxviii-xl.

is distinguished from *u* only by its rounding and by a slightly higher jaw-position. *Ō* has a bigger cavity than *a*; *a* differs from *e* in the slope of the epiglottis and back of the tongue, and has also a larger chamber. The biggest mouth-cavities are apparently those of *ā** and *i*. I have already stated that my *ō* is unrounded; I think I may safely say the same of my *i*. My *ū* and *ō* have, on the other hand, very marked rounding; *ū*, *o*, and *e* are less rounded.

Before concluding, I wish to express the hope that other and more competent observers, and especially scholars of different nationalities, may find time to make, by these or other methods, accurate studies of their own vowels. There are many difficulties to be overcome†—some of them I have pointed out—but the work is intensely interesting, and, on the whole, easier perhaps than this scanty account makes it appear. It is, in my opinion, only through comparing the results of many experiments by many men that we can construct a complete and reliable vowel-system.

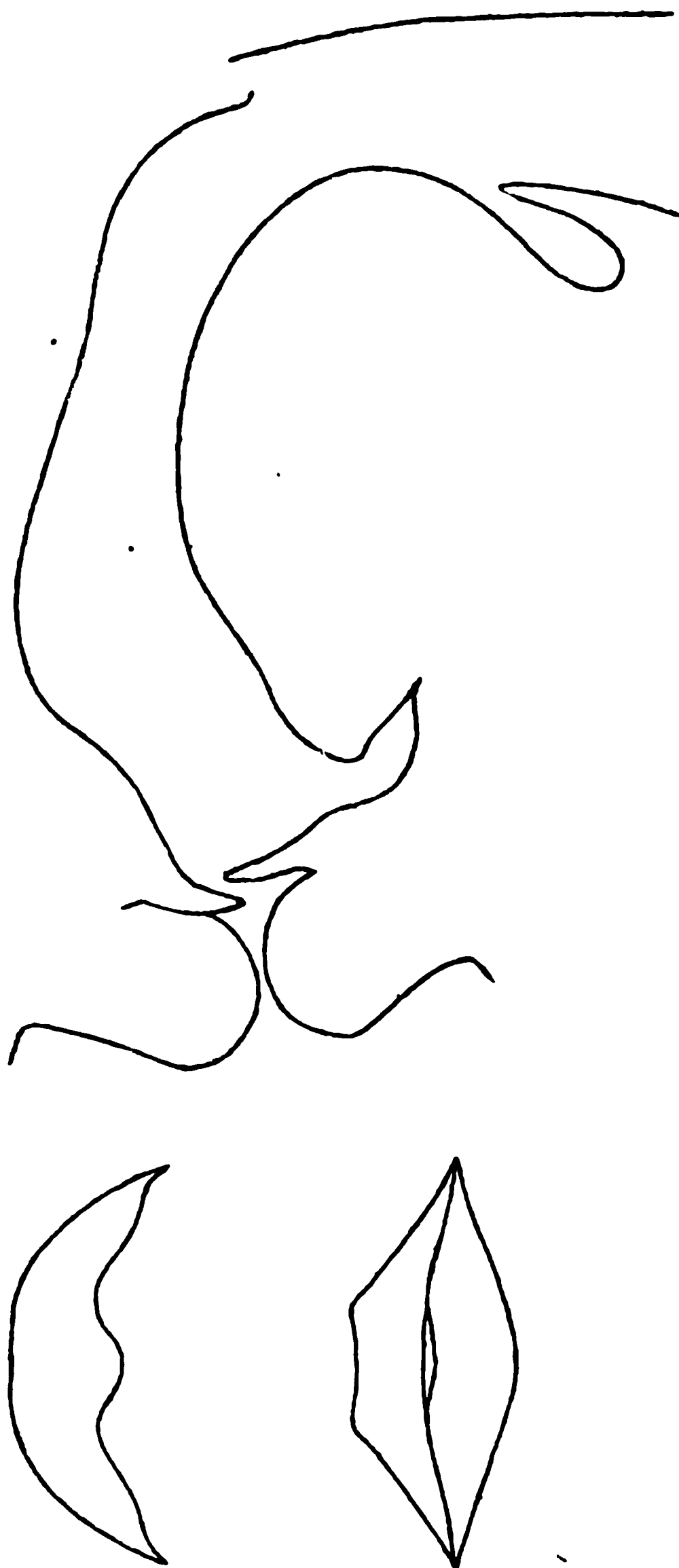
CHARLES H. GRANDGENT,

Director of Modern Languages in the High and Latin Schools,

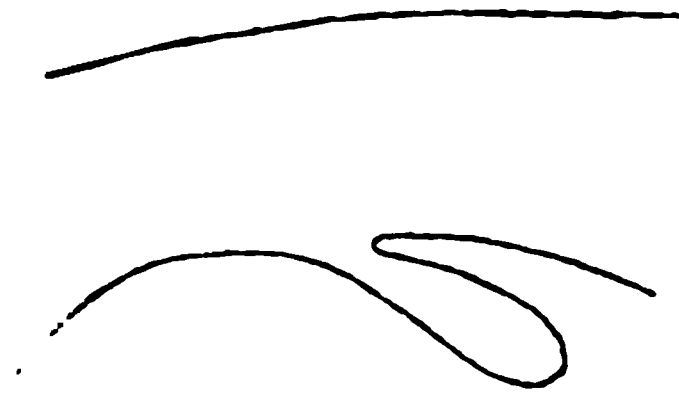
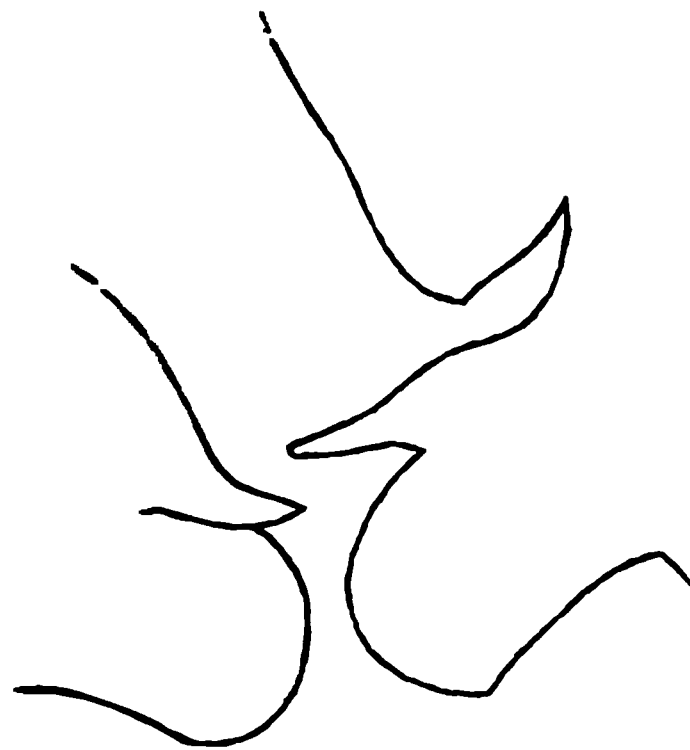
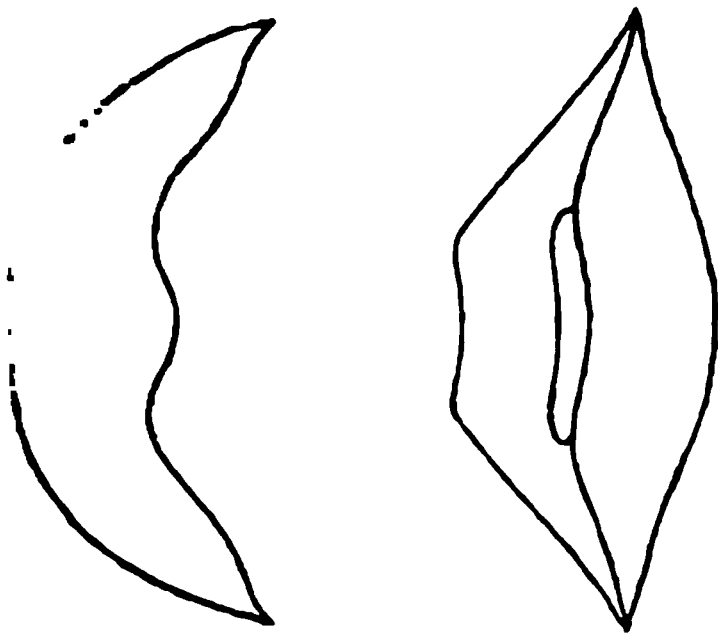
Boston, Mass.

* With persons who round the *ā*, the mouth-cavity for that vowel is probably somewhat smaller than with me. Bell, however, says ("Speech Reading and Articulation Teaching," 1890, p. 13): "Enlarge the cavity of the mouth to the utmost Emitted . . . voice will then have the quality of what is called the 'Low Back' vowel." I do not see how Victor can say ("Phonetik," 1887, p. 15): "Bei *u* ist der Resonanzraum im Munde am grössten." It seems to me that no back vowel can have a smaller cavity than *ū*. The low pitch of this vowel is evidently caused by rounding. Cf. Sweet, "Primer of Phonetics," 1890, p. 26.

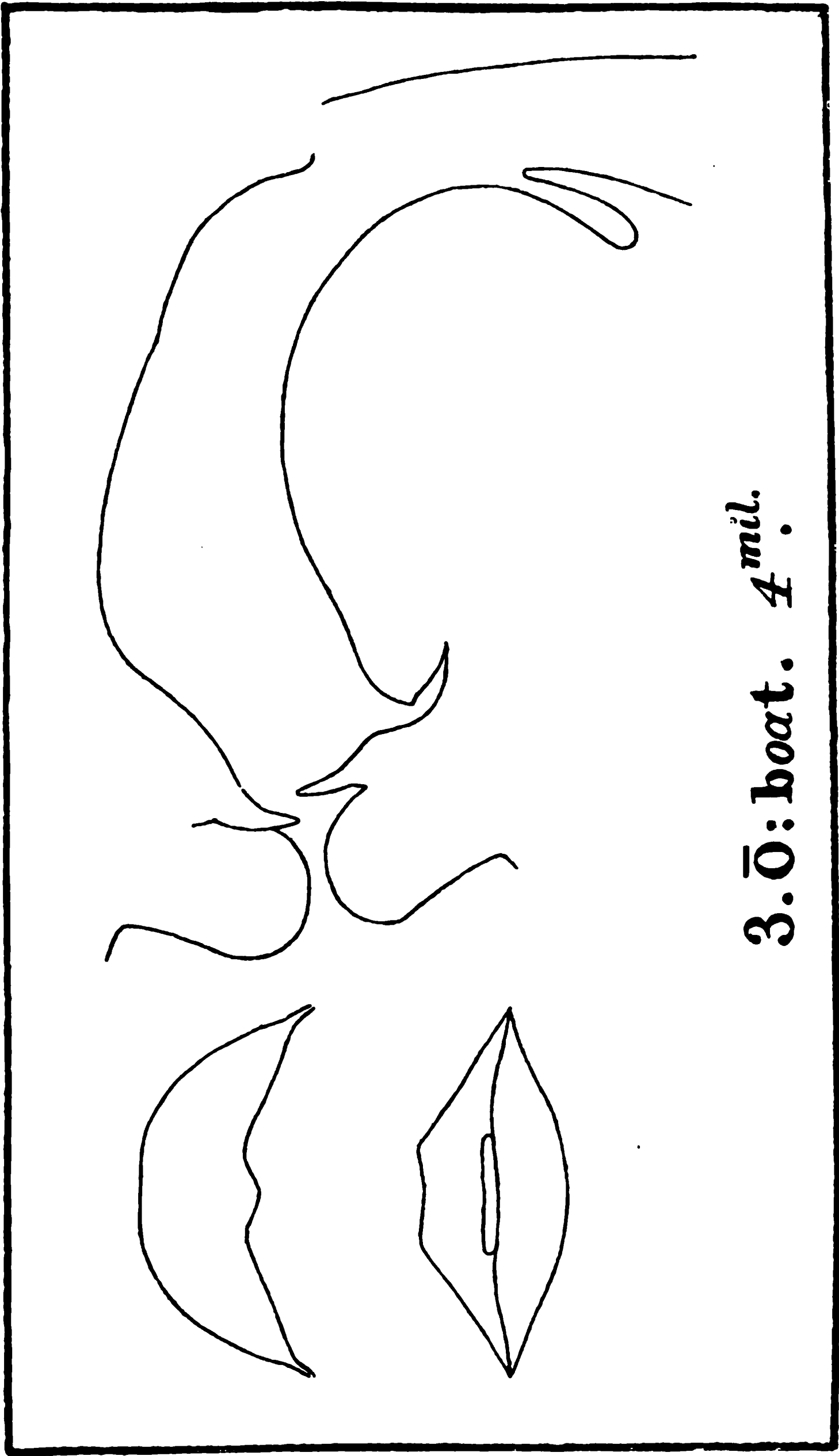
† I ought, perhaps, to say that I made hundreds and hundreds of preparatory measurements before I thought myself sufficiently skilled to begin on the final experiments, the results of which are set forth in this article. The ticklishness of the soft palate, which, at first, is apt to produce choking and retching, can easily be overcome by a little practice; but the sensitiveness of the pharynx, which, if exploration in that region be long continued, is liable to develop into sore throat and coughing, I have never been able to cure. The difference in the effect of contact on the parts touched sometimes affords a clue to the whereabouts of the end of the exploring finger, when that member is not sensitive enough to distinguish, by its own sensation, the soft palate from the inner wall of the pharynx.



1. \bar{U} : boot. Jaw-lowering, 3 millimeters.



2. \ddot{U} :book. $3\frac{1}{2}$ ^{mil.}.



3. 0: boat. 4 mil.



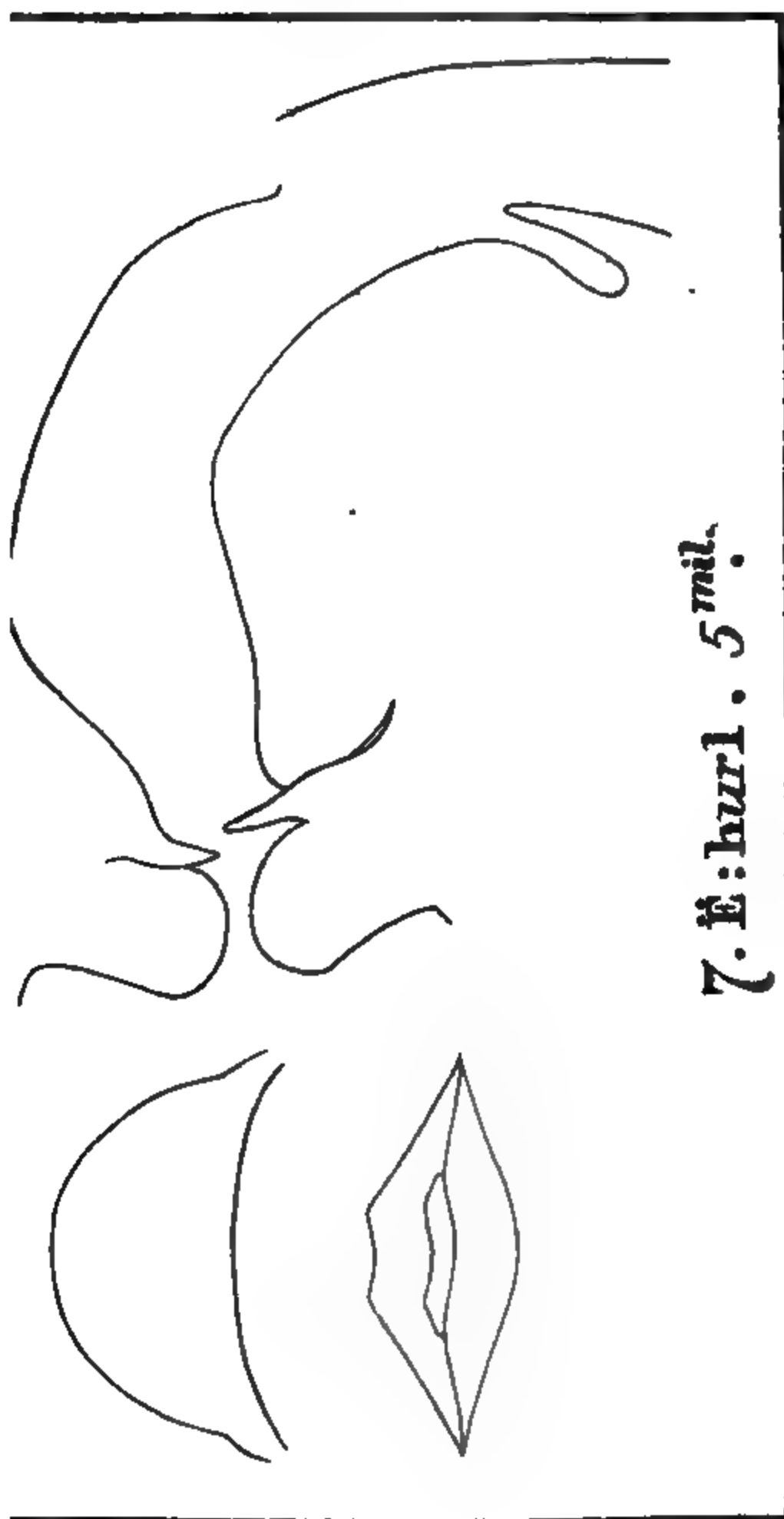
A. Â: bought. $6\frac{1}{2}$ mil.



5.0: whole. $4\frac{1}{2}^{\text{mil}}$.



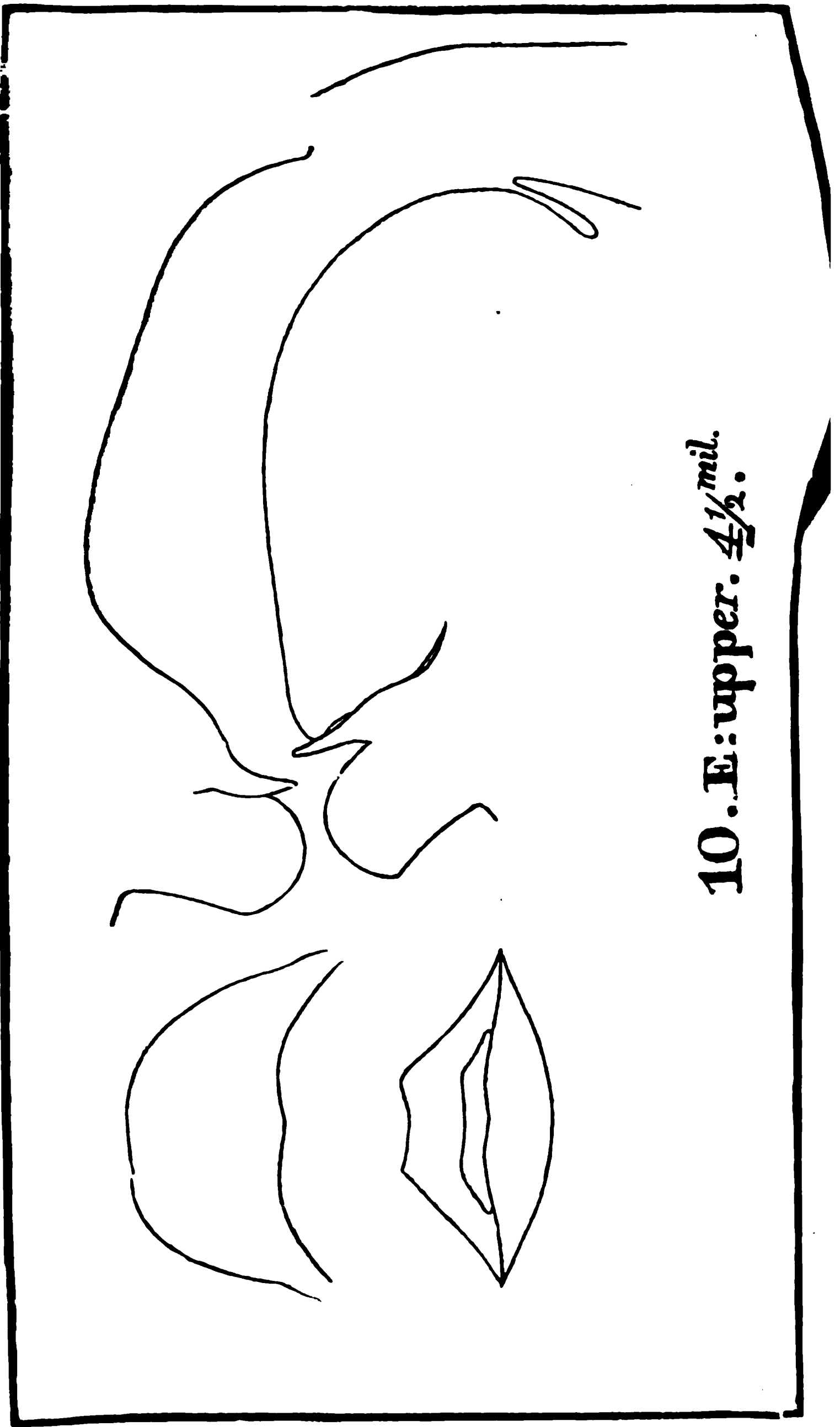
6.U: hull. 6^{mil.}.





8. Ö: pot. 7^{mil.}.

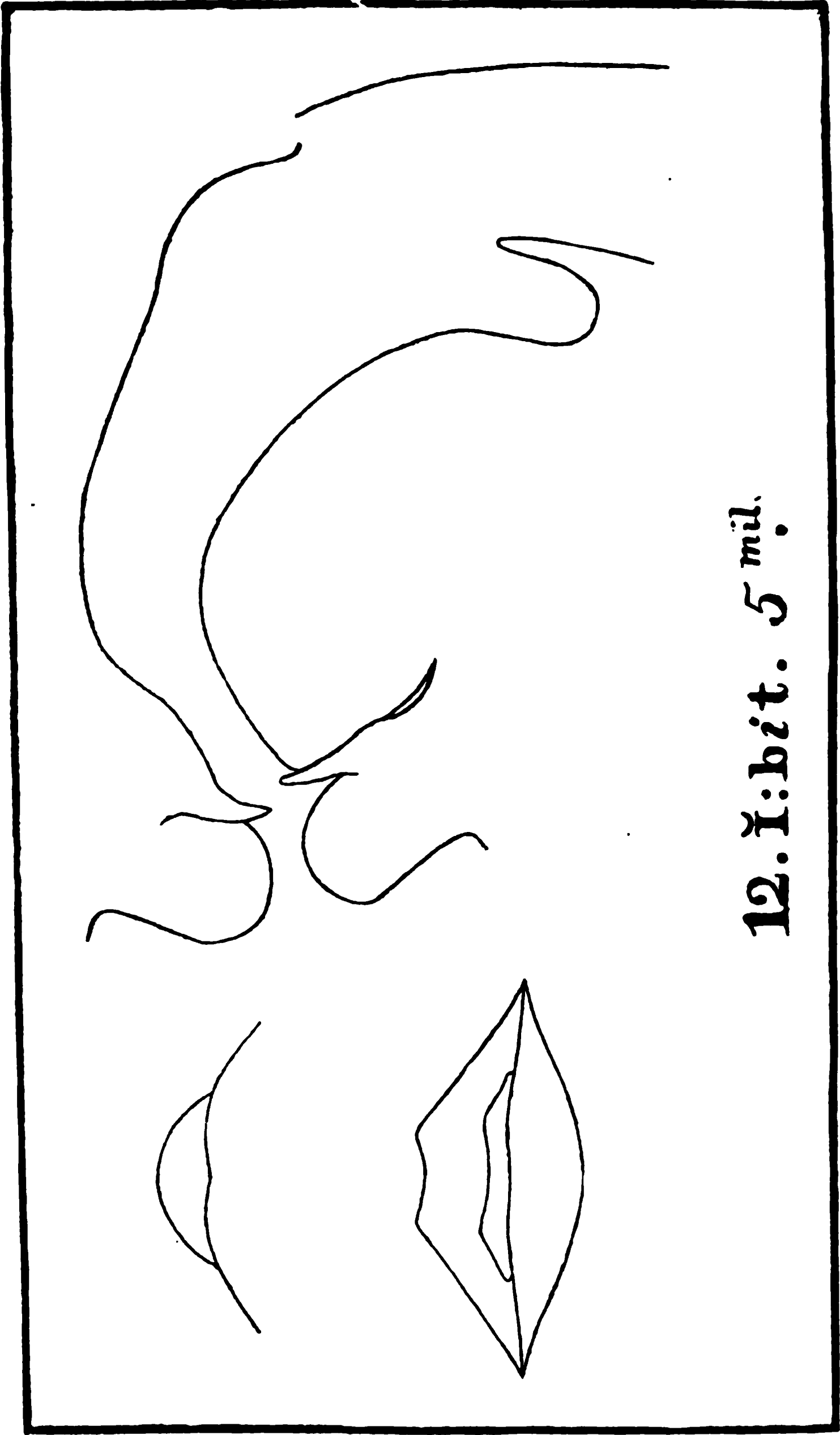




10. E: upper. $4\frac{1}{2}$ mil.



11. I:beat. $4\frac{1}{2}$ mil.



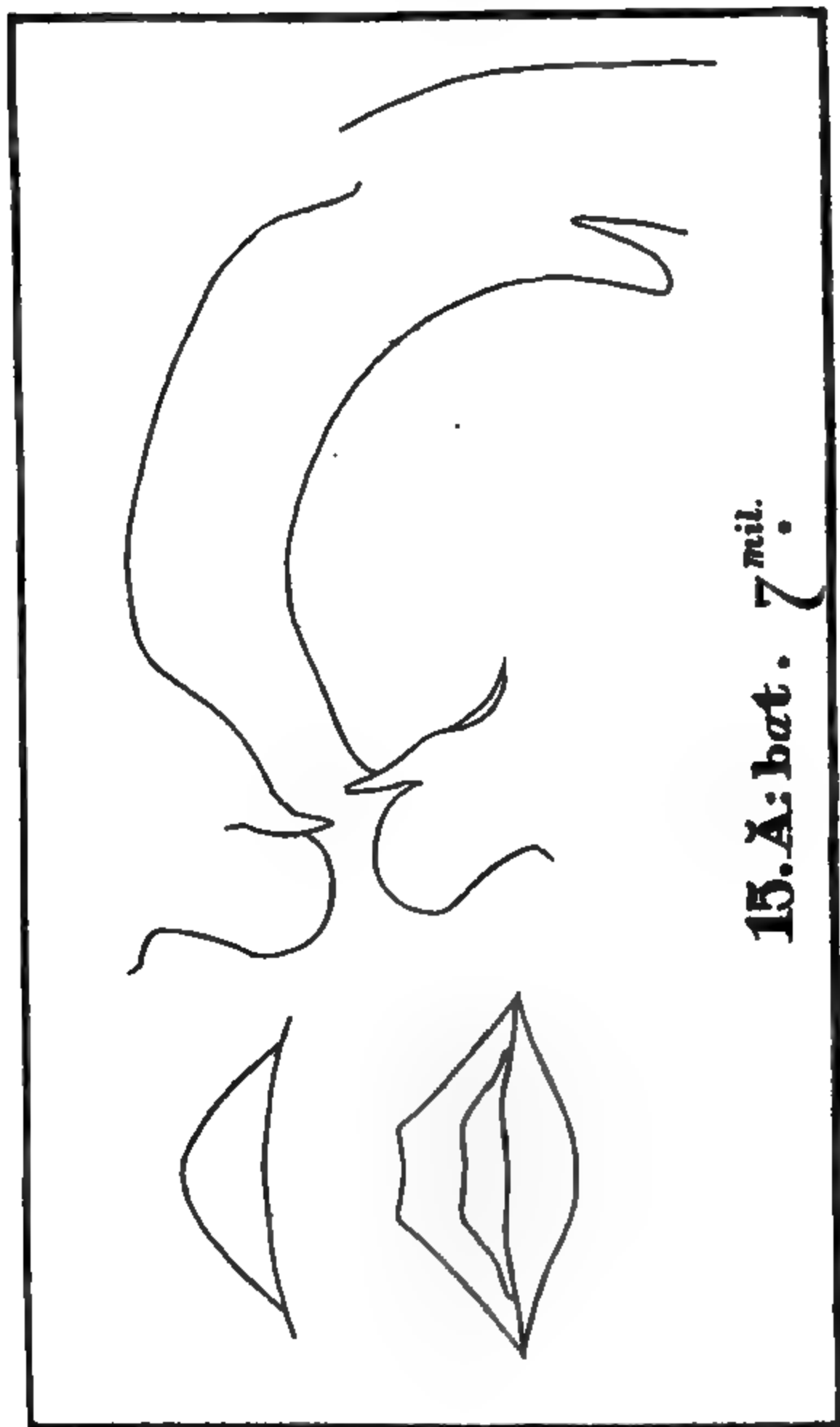


13. É:bait. $5\frac{1}{2}$ mil.

Turd Measurements.



14. Ě:bet. 6^{mil.}



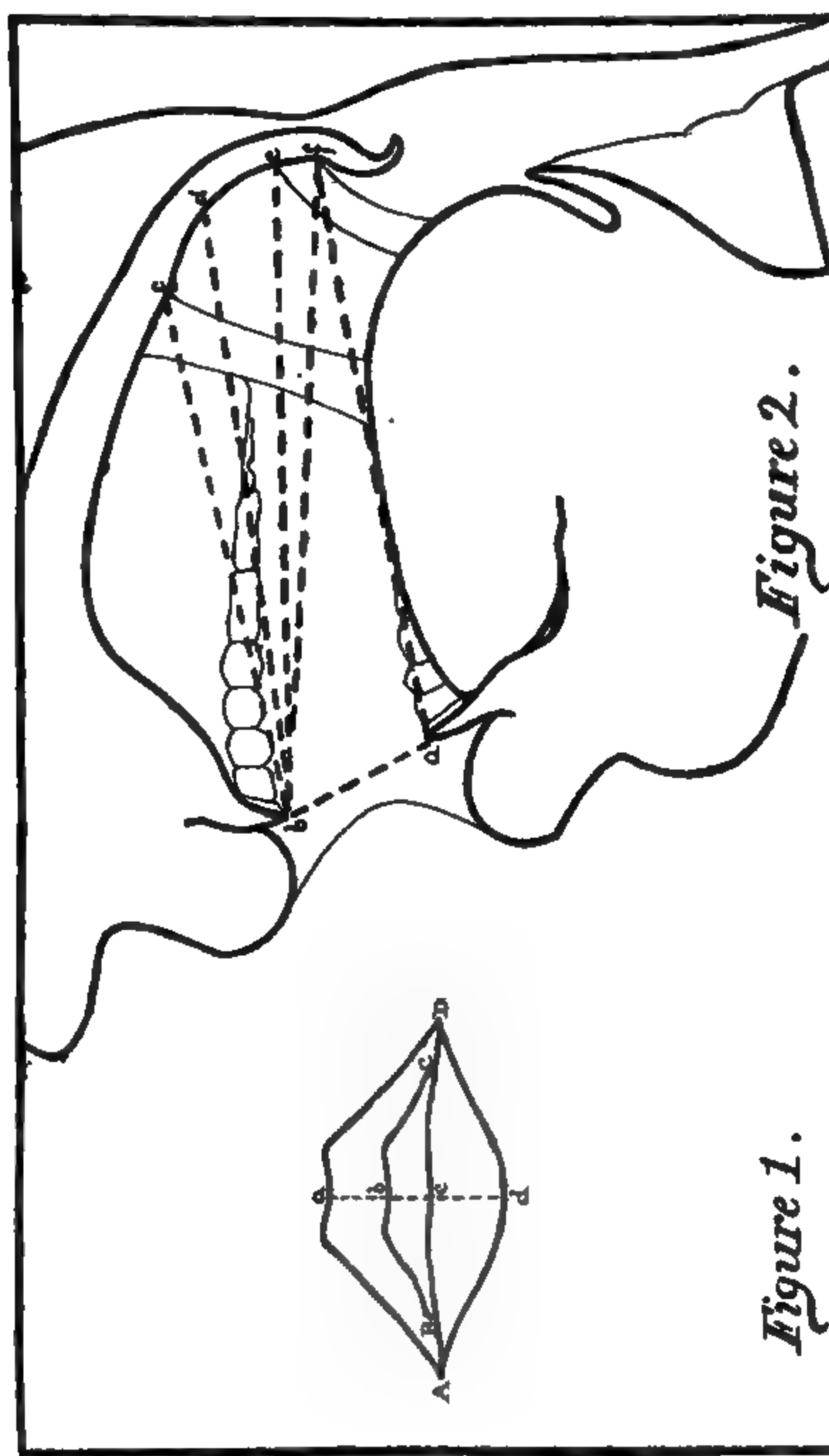


Figure 2.

Figure 1.

VISITORS AND THEIR VIEWS.

WHAT to do with visitors is each year becoming a more and more important question to teachers. They come to us at all times and seasons, and, knowingly or otherwise, are an important factor in our educational problem. They are of various kinds, but classification is difficult by reason of their infinite variety.

Some may plead that our work cannot be fully known or appreciated if the vineyard is not visited. True! but if the number of those coming is so great that the young vines are injured, or the sun and dew kept from the budding branches, then we fancy notices should be posted at the various entrances—"No admittance except on business." Though we would not make "star chambers" of our institutions, yet surely some restrictions might be placed on the inroads of the public.

As it is we will mention a few of the specimens it has been our lot to meet, and then call upon our fellow-laborers to offer suggestions as to ways of utilizing them.

Perhaps the hardest of all to encounter are the lachrymose. It is considerable of a trial, after weeks spent in endeavoring to impart a spirit of courage to the pupils—showing how grand a thing it is to accomplish with *four* senses a deed for which five are used by others—to hear, in the midst of a recitation before a visitor, a smothered sob, and, turning, find said visitor "dissolved in tears." What answer can be made to the question "Why did she cry?" asked by the children after her departure. If we answer, "Because she felt sorry for you," one-half of the class will show their complete disgust, while the other half will settle back to the level from which we have been trying so hard to lift them. For this class of visitors we have as yet been unable to find the slightest use. Not a single way of utilizing their calls has suggested itself to us.

As an offset to this we can recall just one of an entirely antipodal character, who remarked with a merry laugh: "I hope you'll excuse me, but really it all strikes me as so irresistibly funny. You are not annoyed, are you?" and our reply: "Oh, no; you are only a novelty and quite a refreshing one."

Not any more divergent in their views, however, were they than the two following. The one, a foreigner of Catholic belief, asked, after a long call: "Madam, how long have you been

"aching this way?" "Five years." "Five years!!! Madam, you will go straight up: you will not take one step toward the inner place:" and the other who exclaimed: "I should think it must be just like play to you. I would like to try it myself." (We mentally wished she might.)

There are some who come to us apparently imagining that when one word has been spoken by a pupil, all other words will follow without farther help, as though the whole English language had been dammed up, and when once the flood-gates had been opened it would pour forth an unceasing stream. This style of visitors proves the most troublesome to a teacher and beginners in articulation. They are the ones who like best to experiment with the pupils. "Will you allow me to speak to the class?" "Certainly, but please use only baby words, as they do not understand sentences yet;" and then almost invariably the first thing said will be: "What is your name?" or "How long have you been in school?" The explanations given beforehand and which we fancied had been very lucid, have again to be repeated, only to be met by the remark in rebuttal: "Why, surely you teach them what their names are the first thing." Indeed we do not, especially when the pupil may chance to be a Russian, with all the most exasperating consonants of the alphabet combined in the closest manner in her family patronymic.

This visitor departs leaving a feeling behind that the cause in which we have so firm a belief has been injured in her estimation and that we have in some way failed in our duty.

Another species is the credulous, believing all that is told them and occasionally helping statements along by saying, "I suppose you will teach them to sing by and by." What wonder if, some times, the temptation assails us to reply, "Yes, we expect this one to appear in opera when she is eighteen." The result of an honest teacher's remark, that a certain child has some slight hearing, and that this improves his voice, is not infrequently, "If he hears, he should not be in a school for the deaf:" and the suspicion is immediately engendered that some important fact is being concealed about the other pupils. Patient explanations may be given ninety-nine times out of a hundred, but the hundredth time the teacher is very apt to give none and so be relegated to the ranks of "those who conceal the truth."

Can any co-worker inform us as to just what is meant when

visitors ask an articulation teacher, "Will they ever learn to talk?" It usually comes in answer to the question of the teacher as to whether they understand what the children have said. "Yes," they reply, "but will they ever learn to talk?" It is such a quiet set-back, following, as it almost invariably does, an exhibition of what we have considered a remarkable degree of proficiency. Teachers of the deaf are not the only sufferers from this style of questioning, as is shown by the following little anecdote of an Indian lad:

A certain bright lad in one of the Indian mission schools, while working at his bench, was accosted by a visitor who asked him a number of questions, to which he replied in the best English at his command.

"Do you speak English?" was the last astonishing interrogation.

"No; do you?" was the prompt reply of the dusky carpenter, as he turned again to his bench.

There are also visitors who comprehend too quickly, like one who broke into the middle of an explanation with the remark that she understood the system perfectly; she had spent an hour in the school-room before; and others who never comprehend at all, but finish all their speeches with "Yes, but *how?*"

Others there are who imagine a deaf-mute to be some strange variety of the human race kept on exhibition. Such a couple came to us the other day, who, finding themselves in an articulation class, exclaimed, with a disappointed air, "Why, these are just the same as other children." A great compliment indeed, as far as speech was concerned, but not intentionally given, for they left us almost immediately. Oh! ye Vivians with your waving palms, we might almost envy you your mystical passes as these troublesome friends referred to frequently go away awe-struck by the graceful mystery of your swiftly moving fingers, though the same words in the plain prose of articulation would produce no effect.

Yet not all callers are disturbers of the peace, for many with their fresh thoughts and helpful words have more than compensated for their inroads on our time. The places they came from have proved texts for lessons in geography. Bits of history have been given in connection with the countries in which they have lived or wandered, and they themselves have willingly stood as objects from which instructive lessons could be given. How refreshing such callers are, only a tired teacher can know.

Others again, equally welcome, come to us with the Macedonian cry. To them we give all we have to give and do it gladly, bidding them take cheer, and telling them in all sincerity to come as often as they wish, and they shall ever have of our best.

Teachers of the deaf are neither saints nor Jobs (we have sometimes thought that there are more trying things than boils to endure), and patience is an article which, no matter how largely invested in at the beginning of a term, seems destined to be fully used up before it ends. Still, occasionally the little ones themselves avenge our wrongs, and we can recall an instance or two in which the visitor was more embarrassed than the teacher. Having given repeated lessons to one little boy, that a proper position in sitting was not with one knee crossed over the other, we were quite startled one day to hear him ejaculate during a call, "Put down your foot," and see the visitor quietly lower his foot.

Another time a youthful blonde was present whose upper lip bore only the faintest down. One of the tiniest sprites in the class pointed to this moustache to show that he had perceived it. We quietly shook our head by way of rebuke, but alas! misunderstanding the action, and thinking his statement called in question, he sprang to his feet, and, laying his finger on the gentleman's lip, said, "Sure!" "Sure!" Trained to investigate all strange phenomena, and ask about them, is it any wonder if sometimes the powder on a lady's face calls forth the question, "Flour?" or a suspiciously tinted cheek, "Red, how?" Unfortunately, no matter how often at other times their speeches may be misunderstood, such as these no visitor fails to comprehend. If we seem to deal with the matter in too frivolous a spirit, rest assured it is with the "laughter that is akin to tears."

We have often tried to ascertain what previous conception of our work had been formed in the mind of the caller, but tried in vain. That the conception has been strangely at variance with fact we have not the slightest doubt, and have at least one incident to prove it. A number of months ago our pupils attended a fair in a neighboring city. After a long wandering among the exhibits we left the ranks and sat down in the gallery near some strangers, to rest, just in time to hear the following conversation:

“Do you see that lady down stairs with some of those deaf children?”

“No; where?”

“Why, there; that one dressed in blue, standing by that gentleman.”

“Oh, yes; what about her?”

“Well, she is a deaf-mute. I’ve been watching her for a long time. Oh! look! look!! the *poor* thing is trying to talk. Isn’t that PERFECTLY HIDEOUS?”

The joke of the matter is this: The lady referred to is a speaking person with no knowledge of the “articulation method,” and was talking to a speaking gentleman and making no facial contortions whatever, yet this learned spectator with her strangely conceived ideas labelled her as a deaf-mute and called “hideous” that which was not evidently considered so by the gentleman listening. Over such reefs as these do we have to guide our barks and try to find safe anchorage and harbor.

Enough has been said. Were there any signs of a diminution in the numbers of our callers, we would patiently await the outcome, but instead of that, as the weeks go by, they seem to be alarmingly on the increase, and so ere we are utterly overwhelmed we send out “a far cry” through our working world: “What can be done with visitors?”

MISS L. MOFFAT,
Instructor in the California Institution,
Berkeley, Cal.

BENSON.

BENSON is a sable youth of some sixteen summers and large of his age. He was not endowed by nature with a high grade of intellect, and his parents have done what they could to still further hamper his acquirement of knowledge by keeping him out of school until this fall. Whatever doubt there may be in other instances as to the propriety of the terms "deaf and dumb," there can be no question as to their perfect fitness in the case of Benson. I do not mean to imply that he is voiceless, for I often have occasion to realize that he is not, but Benson is dumb in the obnoxious sense of the word. I really think he is the dumbest pupil, not to be idiotic, that it has ever been my privilege to meet. I have long sighed for a chance to try my hand at primary work; I've got it now in the most elementary form, and perhaps if I jot down a few of Benson's idiosyncrasies and how I combated them, I may aid some other worker, or provoke indignant, but none the less valuable, criticism from more experienced primary teachers.

I was led to believe by Benson's brother, who brought him to school, that I might expect something rather out of the ordinary in the work of my new pupil. Perhaps he was right. Indeed, I think he was, but hardly in the sense that he intended. I displayed a highly-colored picture of a cat to Benson, and, after giving him a pencil, pointed to his slate and made the sign for "write." He took the pencil with the air of an experienced penman, arranged his left cuff in a preoccupied sort of way, and looked up at me sidewise as if to inquire whether I desired anything further.

I drew his attention to the cat of many colors and pointed to the slate again, whereupon he once more poised the pencil in mid-air, selected a spot with much circumspection, and looked up at me and croaked. It was the croak of interrogation, and I inferred that he desired to be assured positively before proceeding further that I wished him to do so. I signified that I did. He then made a few hieroglyphics, which may have represented "cat" to his mind, but I feel certain that they would not have done so to any other mind.

I now wrote "A cat" at the top of his slate and requested him to copy the words. He went through the same preliminaries mentioned above, and even extended them somewhat,

but eventually got down to work and made some marks that bore some resemblance to those I had made. He smiled complacently when I patted him on the back, and passed it off with an air that implied he was equal to any emergency.

I pointed to the cat and then to its name, and endeavored to make him understand the meaning of the writing. I also taught him to spell the word on his fingers. Everything that he did was performed with a ponderous sort of emphasis that would have made a person unfamiliar with the deaf suppose that he knew all about it. He would arrange his digits in the most remarkable positions, but with an air of positive conviction that he knew what he was doing. I felt that it was necessary to differ with him quite frequently, but I did so in a semi-apologetic way so as not to startle or disturb his serenity. But indeed I must say for Benson that, although he has now been under my instruction for some three weeks, he has always accepted my sharpest criticism with unruffled mien, and however radically he may dissent mentally, he has never permitted the frown of disapproval to mar his placid features, though at times he makes no attempt to disguise the fact that he cannot see the purpose of all my calisthenics.

I soon abandoned dactylology for the time being, and concentrated my every effort to convincing Benson that the written characters on his slate represented the object shown in the picture. I had him copy the names of four animals represented on the first page of the reader; then I tried to get him to indicate which one of the four words belonged to the picture that I pointed out. But he evidently thought I was going too far. He had written the words: what more did I want? However, since I insisted, how would this one do? I pondered the words (A cow), and decided that they did not harmonize with the picture of a dog. Well, then, if that didn't satisfy me, what did I want?

The experiment of calling up another boy more advanced and having him match the word and picture did not seem to cause any discomfiture on Benson's part. He made some explanatory remarks of a character unknown to me, but they seemed to satisfy himself, and it was evidently unwise and useless to pursue this tack any longer.

After repeated experiments with pictures, I became satisfied that the practical mind of Benson demanded something more concrete than a wood-cut, so I got a box, a hat, and a fan, and

wrote the names on the articles themselves. My pupil soon learned to copy any word placed before him, and he wrote a hand that was distinctly visible to the naked eye. But the difficulty was that he was utterly at sea as soon as the name of the object was concealed from him. He would copy the words "A box" several times, in a long column, and I would think "Surely that has left its mark on his brain," but the moment I erased the words from his slate, turned the object over, and implored him to write its name, he would go maundering and wandering off into a string of cabalistics, introducing large invoices from the English alphabet and not a few characters that I never saw elsewhere than on Benson's slate.

I sometimes called his attention to the length of the original word, but the next time the same thing would occur again. Apparently some crook or curve in the letter last made suggested to his mind another twist that he had made or imagined previously some time, and so one word brought on another, until, on my return from an examination of other slates, I would find him organizing the customary procession, which was only limited in length by the width of his slate.

I tried other devices to impress the word on his mind. I put the object at such a distance from him that he could barely discern the form of the letters. Benson explained to me that he could not see very well at that distance, so I told him to leave his seat, walk over and inspect the letters, and then go back and write them. He pointed out to me that it would be much more convenient for him if I would kindly place the object on his desk. I, however, insisted upon my method, so he uncomplainingly obeyed, though no doubt he considered me a very unreasonable individual.

Whether it was the result of this final, supreme effort of mine, or whether it was the result of the whole chain of circumstances, I cannot say, but after three weeks of this sort of work Benson one day electrified me by writing the words "A box," and then pointing to the object at some distance from him. I was beside myself with delight, and Benson was glad in a condescending way to see me pleased, though I more than half suspect that he thought I was making a great ado about nothing.

Benson now expressed a desire to go home. The folks would be cutting sugar-cane, and his services would be needed. Besides, he had now completed his education; he had accomplished that for which I had been striving for three weeks.

He caught my idea, and he would just go home and continue his literary pursuits there. He did not spell this all out, but I gathered from his elaborate signs that this was about his meaning, and I hastened to assure him that he would do better to stay with us a little longer, and perhaps we might be instrumental in aiding him to learn another word. He took the matter under advisement and ultimately agreed to favor us with his presence for a while longer.

Next day Benson aroused my suspicions by writing not only "A box" but several other words, his own full name among the rest, and investigation revealed the fact that he had a list of words on a piece of paper in his desk, and by occasional furtive glances at it he was able to transfer the words to his slate when he thought my attention was attracted elsewhere. I am afraid I was too much delighted to regard Benson's depravity in the proper way, but I took his "pony" away from him, and feigned a severity that I must admit I did not feel in reproving him for his deceit. He was becomingly depressed, and set to work energetically to write the words without any guide except his memory. He did well enough to restore my confidence, and now I have put him to work on sentences. I have adopted as the form best suited for beginners, "The hat is on the desk." As soon as Benson is able to write this form of sentence, I shall begin to write questions on the black-board and require him to write appropriate answers:

Where is the book?

The book is on the chair.

Where is the sponge?

The sponge is on the box.

I shall follow this up with a change in the preposition, using *in* and *under*. All this is of course subject to the approval and co-operation of Benson, and the forecast is strongly suggestive of the feat of counting chickens before they are hatched. So I will not attempt to calculate just what the next step is to be. Possibly I may have occasion to revise what I have already planned. Possibly my expedients with Benson may cause a smile of derision on the faces of some veterans in primary work; if so, have the goodness to make the smile audible, as Artemus Ward might say, and give me a chance to do better with my next victim.

WM. A. CALDWELL, M. A.,
Principal of the Florida Institution, St. Augustine, Fla.

wrote the names on the article
 learned to copy any word placed
 hand that was distinctly visible
 difficulty was that he was uttering
 the object was concealed from
 "A box" several times, in a
 "Surely that has left its mark
 erased the words from his sight
 implored him to write its name
 wandering off into a string of
 voices from the English alphabet
 I never saw elsewhere that

I sometimes called his attention
 word, but the next time
 Apparently some crook
 suggested to his mind another
 previously some time ago
 until, on my return from
 find him organizing the
 limited in length by

I tried other devices
 put the object at such a distance
 discern the form of
 he could not see it
 leave his seat, walk
 back and write the
 much more convenient
 object on his desk
 uncomplainingly
 very unreasonable

Whether it
 mine, or whether
 stances, I can
 Benson once
 and then per-
 was beside
 descending
 spect that I

Benson
 would be
 Besides.
 finished

has led,
 and
 land,
 and
 tried,
 and
 land,
 we call,
 spread:
 all
 power, and skill,
 still
 thought.
 wake
 make
 wing:
 knowledge bring
 ever.

MISS ALICE C. JENNINGS,

Boston, Mass.

at the Horace Mann School-

PUBLICATIONS.

**Praktisk Veiledning til at Rette Talefeil.
Fonetisk fremstilling af talen. [Prac-
tical Errors in Speech, based on physiolog-
ical principles.] Kristiania: Alb. Cammermeyer.**

The name implies, is intended as a guide for teachers of articulation. Mr. Svendsen, of Mrs. Rosing's Oral School in Christiania, has collected a *sumé* of a series of lectures given by him to his pupils, and published at their request. An outline is best obtained from the table of contents, which shows: The breathing organs; the throat and larynx; the voice; talking through the nose; number of syllables; their principal groups; the vowels; the simple consonants; diphthongs; consonants; combinations of consonants; combinations of consonants and vowels; the use of the breath in speech; regulation of the voice; stammering. A description is first given of the organs employed in the production of sound and their mechanical working in articulation; then the various sounds which these organs are capable of producing are then analyzed and classified; and finally each sound is treated separately and directions given how to teach it. Some of the difficulties commonly met with are also described, together with their causes and remedies. Some interesting practical helps are suggested. For example, to teach the sound *k*, if the usual way of developing it from *t* should not succeed, the child is made to lean backward and a little water is poured into its mouth with the admonition not to swallow it. The vocal organs will then necessarily assume the position for *k*, and with a few repetitions the child will learn to make the position without the water.

The book is adapted to the Scandinavian tongues and will no doubt be useful as a reference-book to teachers of other countries who can understand it. Most of what it contains may, however, be found already in our language, though not, perhaps, in so convenient form. The author acknowledges his indebtedness to the following works: G. Von Meyer, "Unsere Sprachwerkzeuge;" Fournié, "Physiologie de la Voix;" T. Arnold, "Education of Deaf-Mutes;" H. Sweet, "Handbook of Phonetics;" Joh. Storm, "English Philology;" K. Brekke, "Bidrag til dansk-norskens lydlære;" E. Sievers, "Grundzüge der Phonetik."

Om Dovstummes Undervisning. Reiseberetning. [Concerning the Education of Deaf-Mutes. Report of a Journey.] Kristiania: Folkets Avis Bogtrykkeri. 1889. 8vo, pp. 25.

In 1888, with the aid of public funds, Mr. Svendsen made a trip for the purpose of studying the schools in other countries. His observations are gathered from the following schools: Milan Provincial, Mr. Hugentobler's at Lyons, Paris National Institution, the schools in Schleswig, Frankfort-on-the-Main, Cologne, Riehen near Basle, Fredricia, and Copenhagen.

He divides his observations under four heads: 1. The fundamental principles for the classification of pupils. 2. Classification in certain schools. 3. Methods of instruction. 4. Reception of pupils of low intelligence where compulsory education does not exist.

As to the first, after considering the various elements which enter into the consideration of the subject, such as difference in mental capacity, age when deafness occurred, partial hearing, ability to speak, etc., he says that if all were to be instructed in the same classes it would necessarily be at the expense of the most intelligent, because the instruction must be arranged to suit the slowest. It will not do here, as in ordinary schools for the hearing, to suit the instruction to those of average intelligence and let the least intelligent get what they can: for, while the hearing child is to gather more or less knowledge, the deaf child is to penetrate into an unknown language by a succession of steps, the failure to master any one of which might be fatal to further progress.

The desirability of classification is also generally admitted. There are two methods of classification: the French, based on age when deafness occurred and present degree of hearing; and that of the Schleswig school, based on the intellectual capacities of the children. The former and older is the division into semi-mutes and deaf-mutes, and was used and defended as long as the combined system prevailed. But when oral instruction was adopted for all it was soon discovered that a different mode of division must be adopted; for it was found at once, 1882 (in France), that "the children who profited most by oral instruction were not those who had heard and spoken in their earliest childhood." (Houdin, *Rapport Stat.*, p. 8, Bordeaux.) Henceforth those children were gathered together in a class who were found to be best capable of keeping together without regard to what rendered them thus capable. This is the so-called Schleswig method, based on intellectual capacity.

Classification.—The Schleswig Institution receives all children from Schleswig-Holstein, where compulsory education has existed since 1805. In order to facilitate classification new pupils are received only every other year, when about forty pupils are admitted at a time. These are divided into four parallel classes according to intelligence and designated A, B, C, and D. Class D consists of weak-minded children and those of the lowest intelligence. Since 1875 less than one per cent. have been sent home as incapable of being instructed. Two years of trial are given, after which the final classification is made; the four classes are then reduced to three, and designated as A, B, and C. The C class consists of the former D class and the poorest of the C class, and, as some of the children are of extremely low intelligence, it is taught in two divisions.

A similar classification is made in the Paris Institution, which annually receives about thirty boys between the ages of nine and twelve. If older than twelve they “must show evidence of having received instruction previously.” During the first month they are examined by a commission consisting of the director (who is not a practical instructor), the censor (who is the head of the educational department), a physician, and a teacher of the school. Those that are found incapable of profiting by the course of instruction are sent home. They are in general cretins and idiots, and their number does not exceed three or four per cent. The others are divided into three or four parallel classes, as in Schleswig.

In Cologne about three or four per cent. are sent home as unsuitable for instruction.

Methods of Instruction.—It must be understood that Mr. Svendsen's mission on this subject was chiefly to ascertain whether the least intelligent pupils, those classed C and D, should be taught orally or otherwise, as it is pretty generally accepted in his country that the A and B pupils should be so taught.

The evolution of deaf-mute instruction in France is briefly described: the rise and progress of the sign system, its replacement by the spelling-writing method, and the gradual yielding of the latter to the pure oral method, which completely triumphed after the Milan congress.

In reply to questions as to the best method for instructing the C and D pupils, Mr. A. Dubranle, head instructor in the

Paris Institution, writes that when cretins and idiots, constituting about three or four per cent., are left out, all others have the physical and intellectual qualifications necessary for instruction by the oral method, which, moreover, is the best method for backward pupils. Only with the latter more use is made of writing, without relinquishing speech and lip-reading. All the teachers in the Institution concurred in this view except one, who preferred a combination of all known methods—speech, signs, spelling, and writing—for backward pupils.

Mr. Hugentobler, of Lyons, expresses a similar opinion to Mr. Dubranle's, adding that the oral method gives results, even with the dumbest pupils, superior to those of the old spelling-writing method.

The late Abbé Tarra, of Milan, said: "I must admit that the results of the spelling-writing method, however 'pure,' did not come up to what we might expect after our labor. Moreover, little by little we found on trial that all deaf-mutes who are on the whole capable of receiving instruction can learn to speak and to read the lips of others." All the teachers in this Institution agreed that the oral method could and should be used for all children not cretins.

In the Schleswig Institution the lowest four parallel classes, A, B, C, and D, had been in school nine months. In that time the D class, the lowest in intelligence, had learned to speak, lip-read, and understand the meaning of about 300 words, and Mr. Svendsen satisfied himself by actual tests that such was the case. The C class had learned about 400 words and a few sentences. The lip-reading in the latter class was very good; their speech satisfactory.

The director of the Cologne Institution, Mr. Weissweiler, expressed himself thus: "It is not the case that the least intelligent find it difficult to learn to speak; they can often speak better than the more intelligent, but, of course, they retain less of what they learn than the others." Concerning speech-reading, he said: "The less intelligent can often lip-read splendidly, and always sufficiently well." He added: "When my pupils, after six or seven years absence, come to visit me, I am surprised at the progress they have made in language." When asked if even the less intelligent progressed, he replied, "Yes, without doubt; yet not so much as those of greater intelligence, but proportionally as much."

Pupils of low intelligence.—Outside of Scandinavia and

Denmark, compulsory education does not exist except in a few German provinces. But Mr. Svendsen finds that it is an error to suppose that only the bright pupils are received in the various schools. On the contrary, the proportion of pupils of low intelligence is as great in countries where compulsory education does not exist as where it does.

Mr. Svendsen comes to the following conclusions :

1. That all children can and should be instructed orally.
2. That the results by the oral method are better for all the children, even the least intelligent, than by the spelling-writing method.
3. That a division of the pupils is necessary for successful instruction.
4. That division according to intelligence is preferable where the oral method is used as the main method of instruction.
5. That a division into deaf-mutes and semi-mutes should be used only when the former are still instructed by the spelling-writing method.

In the above notice I have endeavored to give the principal arguments in the pamphlet so as to convey the impression intended by the author rather than to criticize them. The readers of the *Annals* can form their own judgment as to their weight. Mr. Svendsen is not, and does not pretend to be, impartial, or to look at the question from both sides. As one convinced of the superiority of the oral method he starts out rather to gather arguments for his side than to examine the field in a critical way. It is, therefore, not surprising that he finds nothing to criticize in the oral schools, while in the single non oral school which he visited he finds nothing to commend. In the Royal Institution at Copenhagen he was present at a recitation of an eight-years class of grade A (the most intelligent), in which the questions and answers were given by finger-spelling, and he says that every question had to be repeated from two to four times, and that he never in an oral class saw so many repetitions and corrections.

OLOF HANSON, M. A.,
Philadelphia, Pa.

TABULAR STATEMENT OF AMERICAN SCHOOLS FOR THE DEAF, 1890.

A.—PUBLIC SCHOOLS IN THE UNITED STATES.

Name.	Location.	Date of opening.	Chief Executive Officer.
1 American Asylum for the Education and Instruction of the Deaf and Dumb....	Hartford, Conn.....	1817	Job Williams, L. H. D., Principal.
2 New York Institution for the Instruction of the Deaf and Dumb.....	Washington Heights, New York, N. Y....	1818	{ Isaac Lewis Piet, LL. D., Principal; { Chauncey N. Brainerd, Superintendent.
3 Pennsylvania Institution for the Deaf and Dumb.....	Philadelphia, (a) Pa.....	1820	A. L. E. Crouter, M. A., Principal.
4 Kentucky Institute for Deaf-Mutes.....	Danville, Ky.....	1823	W. K. Argo, M. A., Superintendent.
5 Ohio Institution for the Education of the Deaf and Dumb.....	Columbus, Ohio.....	1829	James W. Knott, M. S., do.
6 Virginia Institution for the Education of the Deaf and Dumb and of the Blind.	Staunton, Va.....	1839	Thomas S. Doyle, Principal.
7 Indiana Institution for the Education of the Deaf and Dumb.....	Indianapolis, Ind.....	1844	Richard O. Johnson, Superintendent.
8 Tennessee Deaf and Dumb School.....	Knoxville, Tenn.....	1845	Thomas L. Moses, Principal.
9 North Carolina Institution for the Deaf and Dumb and the Blind.....	Raleigh, N. C.....	1845	W. J. Young, M. A., do.
10 Illinois Institution for the Education of the Deaf and Dumb.....	Jacksonville, Ill.....	1846	Philip G. Gillett, M. A., LL. D., Supt.
11 Georgia Institution for the Education of the Deaf and Dumb.....	Cave Spring, Ga.....	1846	W. O. Connor, Principal.
12 South Carolina Inst'n for the Education of the Deaf and Dumb and the Blind....	Cedar Spring, S. C.....	1849	Newton F. Walker, Superintendent.
13 Missouri School for the Deaf and Dumb.....	Fulton, Mo.....	1851	Jas. N. Tate, M. A., do.
14 Louisiana Institution for the Deaf and Dumb.....	Baton Rouge, La.....	1852	John Jastremski, M. D., do.
15 Wisconsin School for the Deaf.....	Delavan, Wis.....	1852	John W. Swiler, M. A., do.
16 Michigan School for the Deaf.....	Flint, Mich.....	1854	M. T. Gass, M. A., do.
17 Mississippi Institution for the Education of the Deaf and Dumb.....	Jackson, Miss.....	1854	J. R. Dobyns, M. A., do.
18 Iowa Institution for the Education of the Deaf and Dumb.....	Council Bluffs, Iowa.....	1856	{ Henry W. Rother, Superintendent; { G. L. Wyckoff, Principal.
19 Texas Deaf and Dumb Asylum.....	Austin, Texas.....	1857	W. A. Kendall, Superintendent.
20 Columbia Institution for the Deaf and Dumb.....	Kendall Green, near Washington, D. C..	1857	E. M. Gallaudet, Ph. D., LL. D., Pres't.
A. Kendall School for the Deaf.....	do.....	1857	James Denison, M. A., Principal.
B. National Deaf-Mute College.....	do.....	1864	E. M. Gallaudet, Ph. D., LL. D., Pres't.
21 Alabama Institute for the Deaf.....	Talladega, Ala.....	1860	Joseph H. Johnson, M. D., Principal.
22 California Institution for the Education of the Deaf and Dumb and the Blind....	Berkeley, Cal.....	1860	Warring Wilkinson, L. H. D., do.
23 Kansas Institution for the Education of the Deaf and Dumb.....	Olathe, Kansas.....	1861	S. T. Walker, M. A., Superintendent.
24 Le Conte's St. Mary's Inst'n for the Improved Instruction of Deaf-Mutes.....	Buffalo, (b) N. Y.....	1861	Sister Mary Anne Burke, Principal.
25 Minnesota School for the Deaf.....	Faribault, Minn.....	1863	Jonathan L. Noyes, L. H. D., Supt.
26 Institution for the Improved Instruction of Deaf-Mutes.....	New York, (c) N. Y.....	1867	D. Greenberger, Principal.
27 Clarke Institution for Deaf-Mutes.....	Northampton, Mass.....	1867	Miss Caroline A. Yale, Principal.

28	Arkansas Deaf-Mute Institute.....	Little Rock, Ark.....	1867	Francis D. Clarke, M. A., Principal.
29	Maryland School for the Deaf and Dumb.....	Fredrick, Md.....	1868	Chas. W. Ely, M. A., Principal.
30	Nebraska Institute for the Deaf and Dumb.....	Omaha, Neb.....	1869	John A. Gillispie, M. A., Principal.
31	Horace Mann School for the Deaf.....	Boston, (d) Mass.....	1869	Miss Sarah Fuller, do.
32	St. Joseph's Institute for the Improved Instruction of Deaf-Mutes.....	Fordham, N. Y., (e).....	1869	Madam Ernestine Nardin, President.
33	West Virginia School for the Deaf and the Blind.....	Romney, W. Va.....	1870	C. H. Hill, Principal.
34	Oregon School for the Deaf.....	Salem, Oregon.....	1870	Rev. P. S. Knight, Ph. D., Sup't.
35	Maryland School for Colored Blind and Deaf-Mutes.....	Baltimore, (f) Md.....	1872	F. D. Morrison, M. A., do.
36	Colorado School for the Deaf and the Blind.....	Colorado Springs, Colo.....	1874	John E. Ray, M. A., do.
37	Chicago Deaf-Mute Day-Schools.....	Chicago, Ill., (g).....	1875	P. A. Emery, M. A., Principal.
38	Central New York Institution for Deaf-Mutes.....	Rome, N. Y.....	1875	Edward B. Nelson, B. A., Principal.
39	Cincinnati Public School for the Deaf.....	Cincinnati, (h) Ohio.....	1875	Miss Caroline Fesenbeck, Principal.
40	Western Pennsylvania Institution for the Instruction of the Deaf and Dumb.....	Edgewood, near Wilkensburg, Pa.....	1876	William N. Burt, M. A., Principal.
41	Western New York Institution for Deaf-Mutes.....	Rochester, N. Y.....	1876	Z. F. Westervelt, Principal and Sup't.
42	Portland School for the Deaf.....	Portland, Me.....	1876	Miss Ellen L. Barton, Principal.
43	Rhode Island School for the Deaf.....	Providence, (i) R. I.....	1877	Miss Laura DeL. Richards, Principal.
44	St. Louis Day-School for the Deaf.....	St. Louis, (k) Mo.....	1878	Jas. H. Cloud, M. A., do.
45	New England Industrial School for Deaf-Mutes.....	Beverly, Mass.....	1879	Miss Nellie H. Swett, do.
46	Dakota School for Deaf-Mutes.....	Sioux Falls, South Dak.....	1880	James Simpson, Superintendent.
47	Milwaukee Day-School for the Deaf.....	Milwaukee, (l) Wis.....	1883	Paul Binner, Principal.
48	Pennsylvania Oral School for the Deaf.....	Scranton, Pa.....	1883	Miss Emma Garrett, Principal.
49	New Jersey School for Deaf-Mutes.....	Chambersburg, near Trenton, N. J.....	1883	Weston Jenkins, M. A., Superintendent.
50	Deaf Mute Department, University of Deseret.....	Salt Lake City, Utah.....	1884	Frank W. Metcalf, Principal.
51	Northern New York Institution for Deaf-Mutes.....	Malone, N. Y.....	1884	Henry C. Rider, Superintendent.
52	Florida Institute for the Blind and the Deaf and Dumb.....	St. Augustine, Fla.....	1885	W. A. Caldwell, M. A., Principal.
53	New Mexico School for the Deaf and Dumb.....	Santa Fé, N. M.....	1885	Lars M. Larson, B. A., Superintendent.
54	Washington School for Defective Youth.....	Vancouver, Wash.....	1886	James Watson, Director.
55	New Orleans Public School for Deaf-Mutes.....	New Orleans, (m) La.....	1886	R. B. Lawrence, Principal.
56	Evansville School for the Deaf.....	Evansville, Ind.....	1886	Chas. Kerney, B. A., Principal.
57	Cincinnati Oral School for the Deaf.....	Cincinnati, Ohio, (n).....	1886	Miss V. A. Osborne, Principal.
58	La Crosse Oral School for the Deaf.....	La Crosse, Wis.....	1886	Miss Viola Taylor, Principal.
59	Deaf, Dumb, and Blind Institution for Colored Youths.....	Austin, Tex.....	1887	W. H. Holland, Superintendent.
60	School for the Deaf of North Dakota.....	Devil's Lake, No. Dak.....	1890	A. R. Spear, Principal.
61	Toledo Deaf-Mute School.....	Toledo, Ohio.....	1890	Alfred F. Wood, Principal.
62	Wausau Day-School for the Deaf.....	Wausau, Wis.....	1890	Miss Edith E. Brown, Teacher.
63	Public Schools, including the National College.			
14	Denominational and Private Schools. (o)			
77	Schools in the United States.			

(a) Broad and Pine, and (Oral Branch) Eleventh and Clinton streets.
(d) No. 178 Newbury street.
(e) This Institution has three branches; one situated at Fordham, another at Brooklyn (113 Buffalo ave.), and another at Throgg's Neck, Westchester co., N. Y.
(f) No. 649 W. Saratoga street.
(g) There are five schools in different parts of the city. Mr. Emery's address is 43 So. May street.
(h) Ninth street, bet. Walnut and Main.
(i) 7th street, bet. Prairie and Chestnut streets.
(j) No. 125 Edward street.
(k) Lexington Ave., bet. 67th and 68th streets.
(l) There are five schools in different parts of the city. Mr. Emery's address is 43 So. May street.
(m) No. 649 W. Saratoga street.
(n) Cor. Fountain and Beverly streets.
(o) Cor. Ninth and Race streets.
(p) See page 60.

TABULAR STATEMENT OF AMERICAN SCHOOLS FOR THE DEAF, 1890—Continued.
PUBLIC SCHOOLS IN THE UNITED STATES—Continued.

Name.	Method of Instruction.*	School-hours.	Industries Taught.‡	NO. OF PUPILS.				No. of INSTRUCTORS.†							
				DURING THE YEAR.				Total have received instruction							
				Total.	Male.	Female.	No. taught by articulation.	Present Dec. 1, 1890.	Whole No.	Male.	Female.	Deaf-mute.	Articulate.		
1 American Asylum.....	Combined, A....	9 to 12 and 2 to 4	Cab., Sh., Ta.....	154	90	64	94	133	2,459	15	7	8	2	1	3
2 New York Institution.....	do..... E. F.	8 to 12 and 1 to 5 (b).....	Art, Bak., Cab., Car., Ch., Dr., Gin., Gl., Pa., Pr., Sh., Ta., Wc.	350	234	116	350	303	3,254	15	7	8	3	3	8
3 Pennsylvania.....do	do..... B. C.	8 to 1 and 2 to 4½.....	Car., Ck., Dr., Gl., Kn., Pr., Sh., Ta.	494	275	216	118	434	2,394	37	9	24	1	3	13
4 Kentucky Institute.....	do..... A. B.	7¾ to 12½.....	Car., Gl., Pr., Se., Sh.....	218	127	91	23	172	998	14	8	6	3	3	1
5 Ohio Institution.....	do..... A....	8 to 10¼, 10½ to 12½, 2 to 4½. (c)	Bo., Car., Pr., Sh., Ta.....	471	244	227	122	376	2,414	25	11	14	3	7	2
6 Virginia.....do	do..... B....	8½ to 1½.....	Car., Pr., Sh., Ta.....	113	68	55	25	85	647	11	8	3	3	2	1
7 Indiana.....do	do..... A. F.	8 to 1 and 2 to 4½.....	Bak., Cab., Fa., Fl., Pr., Sh.....	355	192	163	84	298	1,800	17	9	8	3	6	1
8 Tennessee School.....	do..... B....	8½ to 11½ and 1 to 3½.....	Pr., Sh.....	191	108	83	20	154	.....	9	5	4	3	0	1
9 North Carolina Institution.....	do..... B....	8 to 2	Se., Sh.....	132	64	68	14	118	.....	8	6	2	4	0	1
10 Illinois.....do	do A. B. F.	8 to 11 and 12, 1 to 3 and 4½.....	Pak., Cab., Car., Cl., Dr., Gl., Gl., Pa., Pr., Sh., Wt.	572	332	240	225	507	2,265	34	13	21	6	2	6
11 Georgia.....do (a).....	Manual.....	8 to 1.....	Car., Sh.....	103	64	39	3	58	380	7	5	2	0	3	0
12 South Carolina.....do	Combined, B....	8 to 1.....	Pa., Pr., Se., Sh.....	81	41	40	20	68	257	7	3	4	2	1	2
13 Missouri School.....	do..... A. B.	7¼ to 10½, 10½ to 12½, and 2 to 4½ (b).....	Ba., Cab., Car., Dr., Gl., Pr., Se., Sh., Wt.	327	204	123	83	265	1,143	18	7	11	0	5	2
14 Louisiana.....do	do..... G....	8½ to 12½, 1½ to 2½.....	Pr.....	79	40	39	14	61	.....	5	2	3	1	2	1
15 Wisconsin School.....	do..... A. B.	8 to 12 and 1 to 4½.....	Bak., Cab., Dr., Pr., Sh.....	223	145	78	43	185	568	15	6	9	1	2	3
16 Michigan.....do	do..... A. B.	8½ to 11½ and 1 to 4 (b) ..	Cab., Car., Dr., Pr., Se., Sh.....	338	176	162	50	294	1,083	18	6	12	2	2	1
17 Mississippi Institution.....	do..... A. F.	8½ to 1.....	Car., Pr.....	99	52	47	16	74	.....	8	6	2	2	2	1
18 Iowa.....do	do..... G....	8 to 11½ and 1 to 3.....	Bak., Br., Car., Dr., Pr., Sh., Ta.....	309	199	110	25	270	.....	18	8	10	3	3	2
19 Texas Asylum.....	do..... A....	8 to 12½ and 1½ to 5½.....	Bo., Car., Pr., Sh.....	212	130	82	49	180	460	13	7	6	2	1	1
20 Columbia Institution.....	do..... A. E. F.	8½ to 12½ and 2 to 3.....	Cab., Pr.....	58	42	16	34	40	340	6	4	2	3	1	1
A. Kendall School.....	Manual.....	8 to 12½ and 1½ to 3½.....	None.....	71	59	12	0	54	355	9	9	0	0	2	0
21 Alabama Institute.....	Combined, B....	8 to 1.....	Bl., Cab., Pr., Sh.....	104	53	51	24	83	.....	8	4	4	2	0	2
22 California Institution.....	Combined, A. B.	8 to 1.....	Pr., Wood-working.....	158	95	63	68	145	390	11	8	3	3	...	2
23 Kansas.....do	do..... A. F.	7¼ to 10½, 10½ to 12½ and 2 to 4½ (d)	Ba., Cab., Car., Gl., Pr., Se., Sh., Wc., Wt.	264	150	114	40	232	630	14	7	11	4	2	1
24 Le Conte's St. Mary's Inst.....	do..... E. F.	8 to 12 and 1 to 5.....	Ck., Dr., Pr., Sh., Ta.....	158	85	73	145	133	495	12	0	12	1	0	10
25 Minnesota School.....	do..... A. B. F.	8½ to 11½ and 1 to 3½.....	Cab., Car., Dr., Pr., Sh., Ta.....	231	131	100	65	200	516	11	6	5	0	3	2
26 N. Y. Institut'n for Imp'v'd Ins'n	Oral.....	9 to 12 and 1½ to 3½.....	Use of tools.....	214	114	100	214	191	515	20	9	11	0	0	20
27 Clarke Institution.....	do.....	9 to 12 and 2 to 4.....	Cab., Se., Wc.....	121	61	60	121	107	330	14	0	14	0	1	14

		Comb., A. B. F.	8 to 12 and 1 to 5.	Bak., Ck., Cl., Dr., Pa., Ga., Kn., Pa., Ph., Pr., Sc., Sh., Wc	140	69	71	23	115	354	9	3	6	2	3	1
28	Arkansas Institute.....															
29	Maryland School	do.	A. B. 7½ to 9½, 10 to 12½, and 1½ to 4½	Cab., Pr., Sh.....	106	52	54	54	100	345	10	3	7	3	0	2
30	Nebraska Institute.....	do.	B. F. 7½ to 1	Car., Pr.....	142	79	63	47	117	328	10	5	5	1	1	4
31	Horace Mann School.....	Oral.....	9 to 2.....	Art., Cl., Sc., and use of tools	97	41	56	97	88	308	10	0	10	0	0	10
32	St. Joseph's Institute.....	do.	9 to 3½.....	Ba., Car., Ck., Dr., Pr., Sh., Sc., Ta.....	311	139	172	311	285	335	21	1	20	0	0	20
33	West Virginia School.....	Combined, A.....	8 to 1.....	Cab., Car., Pr., Sh., Ta.....	88	46	42	48	76	289	6	4	2	1	2	1
34	Oregon School.....	Combined, A.....	8½ to 3½.....	Br., Pr.....	30	16	14	10	25	110	4	3	1	2	0	1
35	Md. School for Colored.....	Manual.....	8 to 12 and 1½ to 2½.....	Ch., Sh.....	22	16	6	0	18	65	6	5	1	2	0	0
36	Colorado School.....	Comb., A. B. F.	8 to 1.....	Car., Ma., Pr.....	83	44	39	30	72	175	8	5	3	0	3	2
37	Chicago Day-Schools.....	Combined, A.....	9 to 2½.....	Bl., Car., Mo., Mw., Pa., To.....	35	17	18	12	35	200	6	2	4	1	2	1
38	Central N. Y. Institution.....	do.	A. E. 9 to 12 and 1½ to 3½.....	Car., Dr., Gl., Pr., Sc., Sh., Wc.	156	93	63	156	126	334	10	8	2	2	4	4
39	Cincinnati Public School.....	Manual.....	8½ to 12, 1½ to 3½.....	None.....	13	7	6	0	11	108	1	0	1	1	0	0
40	Western Penna. Institution.....	Combined, A.....	8 and 11 to 1 and 2 to 5.....	Cab., Car., Dr., Sh., Wc.....	194	110	84	30	172	385	12	5	7	0	3	1
41	Western New York Institution.....	do.	D. 8½ to 10½, 10½ to 12½, and 2 to 4 (c).	Cab., Car., Ck., Dr., En., Ga., Pa., Pr.....	171	96	75	171	152	335	15	2	13	0	2	5
42	Portland Day-School.....	Oral.....	9 to 12 and 2 to 4.....	None.....	50	27	23	50	43	84	6	0	6	0	0	6
43	Rhode Island School.....	do.	9 to 1.....	Se.....	41	15	26	41	36	81	5	0	5	0	0	5
44	St. Louis Day-School.....	Manual.....	8½ to 12 and 1 to 3½.....	None.....	34	18	16	0	21	137	2	1	1	0	2	0
45	N. E. Industrial School.....	Combined, A.....	9 to 12 and 2 to 4.....	None.....	32	22	10	23	25	.....	3	0	3	1	1	1
46	Dakota School (a).....	Combined, G.....	9 to 12 and 2 to 4.....	Car., Fa., Pr., Ti.....	51	34	17	16	47	.....	5	3	2	2	1	1
47	Milwaukee Day-School.....	Oral.....	8½ to 11½ and 12½ to 2½.....	Pr.....	49	31	18	49	34	64	6	1	5	0	0	5
48	Pennsylvania Oral School.....	do.	8½ to 11½ and 1 to 2½.....	Ho., Sc., Wt.....	53	30	23	53	44	73	5	0	5	0	0	5
49	New Jersey School.....	Combined, G.....	8½ to 12 and 1 to 2½.....	Car., Dr., Pr., Sh.....	134	67	67	.....	122	206	9	2	7	0	2	1
50	University of Deseret.....	Manual.....	8 to 1.....	Car., Kn., Pr., Se., Sh.....	43	30	13	0	25	65	3	1	2	1	0	0
51	Northern New York Institution.....	Combined, A.....	9 to 12 and 1½ to 3½.....	Dr., Sh., Ta.....	89	53	36	18	83	103	6	4	2	0	2	1
52	Florida Institute.....	Combined, B.....	8 to 12½.....	None.....	18	11	7	10	17	25	2	1	1	0	0	1
53	New Mexico School.....	Manual.....	9 to 12 and 1½ to 3½.....	None.....	9	7	2	0	7	11	1	1	0	1	0	0
54	Washington School.....	Combined, E.....	9 to 12 and 1½ to 3½.....	None.....	33	20	13	9	.....	34	3	2	1	0	0	2
55	New Orleans Public School.....	Manual.....	9 to 2½.....	None.....	8	7	1	0	8	15	1	1	0	0	0	0
56	Evansville School.....	do.	8½ to 11½ and 1½ to 4.....	None.....	39	23	7	0	23	37	2	1	1	1	1	0
57	Cincinnati Oral School.....	Oral.....	8½ to 2½.....	None.....	20	5	15	20	20	27	3	0	3	0	0	2
58	La Crosse Oral School.....	do.	9 to 12 and 1½ to 4.....	None.....	8	6	2	8	7	.....	1	0	1	0	0	1
59	Texas Institution for Colored.....	Combined, A.....	8½ to 11½ and 1½ to 3½.....	Dr., Sh.....	40	26	14	5	32	44	3	2	1	0	1	1
60	North Dakota School.....	Manual.....	9 to 12 and 1½ to 4.....	None.....	17	10	7	0	17	17	2	1	1	1	1	0
61	Toledo Deaf-Mute School.....	do.	4½ hours.....	None.....	17	5	12	0	12	17	1	1	0	1	0	0
62	Wausau Day-School.....	Oral.....	9 to 12 and 1 to 3.....	None.....	5	6	2	8	7	8	1	0	1	0	0	1
63	Public Schools.....				8,572	4,846	3,726	3,403	7,245	28736	601	248	353	80	88	187
14	Denom'l and Pri. Sch's (f).....				329	170	159	279	301	746	40	9	31	0	2	26
77	Schools in the United States.....				8,901	5,016	3,885	3,682	7,546	29482	641	257	384	80	90	213

* See pages 64 — 69. ** Including those who have left school during the year. † Including the principal. ‡ Not including the semi-nite. (a) For the year 1889.
 (b) One session for school and one for shops, by a system of rotation. (c) Two sessions for school and one for shops, by a system of rotation. (d) Two sessions for school and two for shops, by a system of rotation. (e) ½ pupils in school and ½ in shops. (f) See page 60. § Bak. — Baking. Bas. — Basket-making. Bl. — Blacksmithing. Bo. — Book-binding. Br. — Broom-making. Cab. — Cabinet-making. Car. — Carpentry. Ch. — Chair-making. Ck. — Cooking. Cl. — Clay modelling. Co. — Coopersy. Dr. — Dress-making. En. — Engineering. Fa. — Farming. Fl. — Floriculture. Ga. — Gardening. Ho. — Housework. Kn. — Knitting. Ma. — Mattress-making. Mi. — Millinery. Mo. — Moulding. Mw. — Machine work. Pa. — Painting. Ph. — Photography. Pl. — Plumbing. Pr. — Printing. Se. — Sewing. Sh. — Shoemaking. Ta. — Tailoring. Ti. — Tinning. To. — Tool-making. Wc. — Wood-carving. Wt. — Wood-turning.

TABULAR STATEMENT OF AMERICAN SCHOOLS FOR THE DEAF, 1890—Continued.
PUBLIC SCHOOLS IN THE UNITED STATES—Continued.

Name.	Vacation.	How Supported.	Value of buildings and grounds.	Expenditure—last fiscal year.		No. volu. in library.
				For support.	For buildings and grounds.	
1 American Asylum.	Last Wed. in June to second Wed. in Sept.	Endowment and N. E. States.	\$250,000	.....	.....	2,000
2 New York Institution.	Fourth Wed. in June to first Wed. in Sept.	State, counties, and pay pupils.	456,000	\$38,684	\$6,124	4,650
3 Pennsylvania do.	Last Wed. in June to Sept. 15.	State endowment, and pay pupils.	850,000	103,172	2,900	6,400
4 Kentucky do.	June 19 to Sept. 10.	State.	176,500	36,877	7,130	1,650
5 Ohio do.	Third Wed. in June to second Wed. in Sept.	do.	750,000	74,700	3,500	2,014
6 Virginia do.	Second Wed. in June to first Wed. in Sept.	do.	250,000	.....	.....	250
7 Indiana do.	Second Wed. in June to fourth Wed. in Sept.	do.	189,600	49,929	46,034	3,800
8 Tennessee School.	Second Wed. in June to second Fri. in Sept.	do.	150,000	26,000	7,000	700
9 North Carolina Institution.	Second Wed. in June to second Wed. in Sept.	do.	75,000	40,000	.....	1,000
10 Illinois do.	Second Wed. in June to third Wed. in Sept.	do.	400,000	94,000	9,000	11,750
11 Georgia do.	Third Wed. in June to second Wed. in Sept.	do.	60,000	.....	9,000	1,200
12 South Carolina do.	Last Wed. in June to first Wed. in Oct.	State and pay pupils.	55,000	13,188	1,100	350
13 Missouri do.	Second Wed. in June to second Wed. in Sept.	State.	250,000	49,054	.....	1,100
14 Louisiana do.	June 1 to Oct. 1.	do.	200,000	12,000	10,000	200
15 Wisconsin School.	Second Wed. in June to first Wed. in Sept.	do.	110,000	36,836	909	1,400
16 Michigan do.	Thurs. after June 7 to third Wed. in Sept.	do.	419,755	57,000	600	2,331
17 Mississippi do.	Third Wed. in June to first Mon. in Oct.	do.	125,000	13,972	1,500	800
18 Iowa do.	Second Wed. in June to second Wed. in Sept.	do.	400,000	37,500	27,000	1,800
19 Texas Asylum.	1st Wed. in June to 1st Wed. in Sept.	do.	150,000	35,614	3,477	600
20 Columbia Institution.	Wed. before last Wed. in June to Thurs. before last Thurs. in Sept.	United States and pay pupils.	700,000	58,675	4,300	3,550
21 Alabama do.	June 10 to Sept. 10.	State.	100,000	2,568	5,000	600
22 California do.	Second Wed. in June to 4th Wed. in August.	do.	442,000	48,166	95,000	1,400
23 Kansas do.	Second Wed. in June to second Wed. in Sept.	do.	178,000	36,746	.....	1,300
24 La. Centenary St. Mary's Inst.	Wed. before last week in June to first Mon. in Sept.	State, counties, and pay pupils.	153,000	28,703	.....	600
25 Minnesota School.	First Wed. in June to second Wed. in Sept.	State.	200,000	24,580	8,000	1,800
26 N. Y. Inst. for Imp'd Ins'n.	Third Wed. in June to first Wed. in Sept.	State, counties, and pay pupils.	350,000	41,598	12,748	900
27 Clarke Institution.	Forty weeks after third Wed. in Sept. to third Wed. in Sept.	Endowment, N. E. States, and pay pupils.	68,500	26,739	1,500	1,700

28	Arkansas Institute.....	Second Wed. in June to first Wed. in Oct.....	State.....	90,000	16,355	1,000	512
29	Maryland School.....	Third Wed. in June to second Wed. in Sept.....	do.....	250,000	26,390	.....	3,000
30	Nebraska Institute.....	Middle of June to middle of Sept.....	do.....	116,000	24,456	1,050	1,000
31	Horace Mann School.....	Last Tues. in June to first Wed. in Sept.....	State and city.....	118,500	10,506	29,189	525
32	St. Joseph's Institute.....	Last Fri. in June to second Mon. in Sept.....	State, counties, and pay pupils.....	266,629	55,932	14,037	650
33	West Virginia Institution*.....	Forty weeks after second Wed. in Sept. to second Wed. in Sept.....	State.....	70,000	25,834	.....	796
34	Oregon School.....	May 1 to first Wed. in Sept.....	do.....	6,000	5,660	.....	.....
35	Md. School for Colored*.....	June 25 to Sept. 10.....	do.....	30,000	7,194	703	80
36	Colorado Institute*.....	First Wed. in June to first Wed. in Sept.....	do.....	155,000	30,000	80,000	600
37	Chicago Day-Schools.....	June 28 to first Mon. in Sept.....	City.....	125,000	38,846	1,832	.....
38	Central N. Y. Institution.....	Second week in June to third Wed. in Sept.....	State and counties.....	.....	700	.....	.....
39	Cincinnati Public School.....	June 23 to second Mon. in Sept.....	City.....	189,967	34,904	.....	776
40	Western Penn'a Institution.....	Last Wed. in June to first Wed. in Sept.....	State and voluntary contributions.....	100,000	37,721	3,145	1,500
41	Western New York Institution.....	Forty-two w'ks after first Mon. in Sept. to first Mon. in Sept.....	State, counties, and pay pupils.....	.....	.....	.....	.....
42	Portland Day-School.....	Last Sat. before July 4 to second Mon. in Sept.....	State and city.....	.....	4,910	.....	96
43	Rhode Island School.....	Last Fri. in June to first Mon. in Sept.....	State.....	.....	.....	.....	.....
44	St. Louis Day-School.....	Second Friday in June to first Mon. in Sept.....	City.....	12,000	4,145	.....	450
45	N. E. Industrial School.....	Third Wed. in June to second Thurs. in Sept.....	Voluntary contributions and State.....	.....	.....	.....	.....
46	Dakota School (a).....	Second Wed. in June to second Wed. in Sept.....	State.....	15,000	5,000	.....	25
47	Milwaukee Day-School.....	Last Fri. in June to first Mon. in Sept.....	State and city and county.....	65,000	8,760	13,793	.....
48	Penna. Oral School.....	June 20 to Sept. 1.....	State.....	100,000	.....	.....	500
49	New Jersey School.....	June 16 to Sept. 10.....	do.....	100,000	7,091	35,000	25
50	University of Deafet.....	Second Fri. in June to first Mon. in Sept.....	Territory and pay pupils.....	67,000	22,477	21,757	.....
51	Northern N. Y. Institution.....	Second Wed. in June to second Wed. in Sept.....	State and counties.....	16,000	5,000	3,500	.....
52	Florida Institute*.....	Second Mon. in June to Oct. 1.....	State.....	73,000	1,190	.....	60
53	New Mexico School.....	Third week in June to second week in Sept.....	Territory and pay pupils.....	.....	.....	.....	.....
54	Washington School*.....	Thurs. after last Wed. in May to last Wed. in Aug.....	State.....	.....	734	.....	.....
55	New Orleans Public School.....	July 1 to Oct. 1.....	City.....	.....	1,800	.....	.....
56	Evansville School.....	First Thurs. in June to first Mon. in Sept.....	do.....	.....	1,250	.....	.....
57	Cincinnati Oral School.....	June 20 to Sept. 8.....	State and city.....	.....	.....	.....	.....
58	La Crosse Oral School.....	First Mon. in Sept.....	do.....	.....	.....	.....	.....
59	Texas Institution for Colored*.....	June 15 to Sept. 15.....	State.....	37,000	16,000	600	.....
60	North Dakota School.....	Second Wed. in June to second Wed. in Sept.....	State.....	.....	.....	.....	.....
61	Toledo School.....	June 20 to first Mon. in Sept.....	City.....	.....	.....	.....	.....
62	Wausau Day-School.....	June 18 to Sept. 8.....	State and city.....	.....	.....	.....	.....
63	Public Schools.....	.....	.....	.....	.....	.....	.....
14	Denominational and Private Schools. (See next page.)	.....	.....	.....	.....	.....	.....
77	Schools in the United States.....	.....	.....	.....	.....	.....	.....

* Contains a department for the blind also, the expenses of which are included in the statement of expenditures.
(a) For the year 1889.

Name.	Vacation.	How Supported.	Total have rec'd instr'n.
1 Whipple's Home School.....	June 5th to Sept. 3d.....	Tuition fees and State and towns.....	.....
2 Germ. Ev. Lutheran Inst'n.....	July 15th to September 1st.....	Tuition fees and Lutheran Congregations.....	170
3 St. John's Cath. Institute.....	End of June to first week in Sept.....	Voluntary contributions and tuition fees.....	199
4 Mr. Knapp's Institute.....	.....	.....	.....
5 McCowen Oral School.....	Middle of June to middle of Sept.....	Tuition fees.....	57
6 Ephpheta School.....	Last Friday in June to first Monday in Sept.....	Ephpheta Society.....	95
7 Maria Consilia Institute.....	Last week of June to first week of Sept.....	Tuition fees and contributions.....	69
8 Miss Keeler's Class (i).....	Third Wednesday in June to second week in Sept.....	Tuition fees.....	15
9 St. Mary's Institution.....	June 25th to first Monday in September.....	Voluntary contributions.....	52
10 Cathedral School (i).....	Third Wednesday in June to first Monday in Sept.....	Tuition fees and Archbishop.....	28
11 Miss Parker's School.....	Middle of June to Sept. 14th.....	.....	15
12 Sarah Fuller Home.....	No regular vacations.....	Private subscription.....	21
13 Eastern Iowa School.....	June 12th to Sept. 15th.....	Contributions, fairs, and exhibitions.....	18
14 Albany School.....	Last of June to second week in September.....	Tuition fees.....	7
14 Denom. and Private Schools.....	.....	.....	746

* Including the pupils who have left during the year. † Including the principal. ‡ Not including the semi-mute teachers. (a) Nos. 201-205 Holliday street.
(b) 6550 Yale street. (c) 409 S. May street. (d) 1849 Cass Avenue. (e) 27 East Forty-sixth street. (f) Cor. Mound and Elizabeth streets.
(g) 536 Mississippi street. (h) 40 Canal street. (i) 42 Lancaster street. (k) 2945 Olive street. (l) For the year 1890. (m) See pages 64 — 69.

Fact in Canada, 1890.

Name.	NO. OF PUPILS.				No. of Instructors.		School-hours.	Method of In- struction (c).	Industries Taught.			
	DURING THE YEAR.				one,†							
	Total.	Male.	Female.	No. taught during the year.	Total taught during the year.	Whole No.	Male.	Female.				
1 Catholic Inst'n, (Male)	120	120	0	59	130	560	30	0	Combined B.	Ha., Bl., Bo., Cal., Car., Pa., Ga., Pa., Pr., Sh., Ta., Wt.		
2 Catholic Inst'n, (Female)	165	0	165	78	147	590	36	0	do. C.	Art., Fin., Ku., No., Weaving.		
3 Dallas Institution	74	40	34	31	61	345	6	3	do. A.	Car., Ga., Sh.		
4 Ontario Institution	291	159	132	42	261	872	16	8	do. A.	Car., Dr., Sh., Ta.		
5 Mac Kay Institution	40	28	12	25	44	134	5	1	do. E.	Cal., Car., Dr., Pr., Wt.		
6 Free School Institution	23	13	10	7	20	43	3	0	do. A.	No.		
7 Methodist Institution	30	21	9	3	26	30	3	1	do. E.	No., Wt.		
8 Schools in Canada	751	397	354	240	689	2,364	102	46	53	10	4	49

1 Catholic Male Inst'n and Female Inst'n for the Pr. and P. Inst'n.
 2 Catholic Female Inst'n for the Pr. and P. Inst'n.
 3 Dallas Institution for the Pr. and P. Inst'n.
 4 Ontario Institution for the Pr. and P. Inst'n.
 5 Mac Kay Institution for the Pr. and P. Inst'n.
 6 Free School Institution for the Pr. and P. Inst'n.
 7 Methodist Institution for the Pr. and P. Inst'n.

7 Schools in Canada.

Name.	Vacation.	How Supported.	Value of buildings and grounds.	EXPENDITURE LAST FISCAL YEAR.		No. volumes in library.
				For support.	For buildings and grounds.	
1 Catholic Inst'n, (Male)	Third Wed. in June to first Wed. in Sept.	Province, pupils, and vol. contributions .....	.....	.....	.....	1,000
2 Catholic Inst'n, (Female) (d)	July 1st to Sept. 1st	Province and voluntary contributions .....	.....	.....	.....	1,200
3 Halifax Institution	First Wed. in July to first Wed. in Sept.	Province and voluntary contributions .....	.....	\$8,668	\$462	.....
4 Ontario Institution	Third Wed. in June to second Wed. in Sept.	Province	\$210,000	40,753	7,000	1,700
5 Mackay Institution	Third Wed. in June to second Wed. in Sept.	Province, pupils, and vol. contributions	45,800	6,471	1,059	500
6 Fredericton Institution	July 1 to Sept. 1	Province and voluntary contributions	20,000	4,060	13,000	.....
7 Manitoba Institution	Second Wed. in June to second Wed. in Sept.	Province	35,000	5,790	11,000	300
7 Schools in Canada.						

* Including those who have left school during the year. + Including the principal. † Not including the semi-mute teachers. * Ba. = Baking. Bl. = Blacksmithing. Bo. = Book-binding. Cab. = Cabinet-making. Car. = Carpentry. Dr. = Dress-making. Em. = Embroidering. Fa. = Farming. Ga. = Gardening. Kn. = Knitting. Pa. = Painting. Pr. = Printing. Se. = Sewing. Sh. = Shoemaking. Ta. = Tailoring. Wc. = Wood-carving. Wt. = Wood-turning. (a) No. 401 St. Denis street. (b) Notre Dame de Grace. (c) See pages 64-69. (d) For the year 1889.

INSTRUCTION IN AMERICAN SCHOOLS.

"Instruction" named in the foregoing Tabular Statement of American Schools (pages 56, 57, 60, 62) may be

Method.—The sign-language, the manual alphabet, and the chief means used in the instruction of the principal objects aimed at are mental training in the comprehension and use of language. The degree of relative importance given to these objects in different schools; but it is a difference in the end aimed at is the same in all. If the pupils have a fair degree of hearing, their teachers, who hear and speak, usually try to improve their articulation; but no special teachers are employed, and comparatively little attention is given to speech-reading.

Schools following this method are thirteen in number, viz., Maryland Colored, Cincinnati Public, New Mexico, New Orleans, Evansville, Eastern Iowa, North Dakota, and Toledo Normal College. The whole number of pupils was 402.

Method.—Articulation and speech-reading, together with the manual alphabet, are made the chief means of instruction, and the comprehension and speech-reading, as well as mental training in the written language, is aimed at. Signs are used as far as possible, and the manual alphabet is generally employed. There is a difference in different schools in the degree to which the use of natural signs is allowed in the course, and also in the prominence given to the manual alphabet as an auxiliary to articulation and speech-reading in the instruction; but they are differences only of degree, and the end aimed at is the same in all. The schools following this method are nineteen in number, viz., American School for the Deaf, Hartford, Connecticut, Improved Instruction, Clarke, Horace Mann, St. Louis, Rhode Island, Milwaukee, Pennsylvania, and others.

"In the case of some of the older pupils, for whom we find the manual alphabet more advantageous." Madam E. NARDIN, Presi-

Oral, Cincinnati Oral, La Crosse, Wausau, Whipple's, German Lutheran,* Mr. Knapp's, McCowen,† Miss Keeler's, Miss Parker's, Sarah Fuller, and Albany schools. Total number of pupils during the year (not including those of Mr. Knapp's Institute, from which returns were not received), 1,104.

III. *The Combined System.*—Articulation and speech-reading are regarded as very important, but mental development and the acquisition of language are regarded as still more important. It is believed that in many cases mental development and the acquisition of language can be better attained by some other method than the Oral, and, so far as circumstances permit, such method is chosen for each pupil as seems best adapted to his individual case. Articulation and speech-reading are taught where the measure of success seems likely to justify the labor expended. The schools in America using some form of the Combined System are fifty-two in number, viz., the American, New York, Pennsylvania,‡ Kentucky, Ohio, Virginia,§ Indiana, Tennessee, North Carolina, Illinois, South Carolina, Missouri, Louisiana, Wisconsin, Michigan, Mississippi, Iowa, Texas, Kendall, Alabama, California, Kansas, Le Couteulx St. Mary's, Minnesota, Arkansas, Maryland, Nebraska, West Virginia, Oregon, Colorado, Chicago, Central New York, Western Pennsylvania, Western New York, New England Industrial, Dakota, New Jersey, Northern New York, Florida, Washington, Texas Colored, St. John's Catholic, Ephpheta, Maria Consilia, St. Mary's, Montreal Catholic (both Male and Female), Halifax, Ontario, Mackay, Fredericton, and Manitoba schools. The schools during the year contained 8,146 pupils, of whom 2,818 were taught articulation and speech-reading. The number taught articulation and speech-reading in each school may be ascertained from the foregoing Tabular Statement of American Schools.

The various methods in which the Combined system is applied in American schools may be classified as follows :§

* *German Lutheran Institution.*—"The German language is used in the oral instruction." D. H. UHLIG, Director.

† *McCowen Oral School.*—"Oral and Aural." Miss MARY McCOWEN, Principal.

‡ The Principal of the Pennsylvania Institution prefers to designate the methods there pursued as "Manual and Oral" rather than "Combined," and the Principal of the Virginia Institution the methods there pursued as "Manual." See page 67.

§ In cases where heads of schools replying to our circular of inquiry

A. The general instruction of the pupils is carried on chiefly by the Manual method. Part of them receive special training in articulation and speech-reading. The schools following this method are sixteen in number, viz., the American, Ohio, Indiana, Mississippi, Texas, Kansas, West Virginia, Oregon, Chicago, Western Pennsylvania, New England Industrial, Northern New York, Texas Colored, Maria Consilia, Halifax, and Ontario schools. Total number of pupils during the year, 2,465; number taught articulation and speech-reading, 661.

A. B. Part of the pupils are taught by the Manual method, others by the Oral method. Of the former, part receive special training in articulation and speech-reading. All are permitted to mingle freely with one another out of school-hours. This is the method of ten schools, viz., the Kentucky, Illinois, Missouri, Wisconsin, Michigan, California, Minnesota,* Arkansas, Maryland, and Colorado schools. Total number of pupils, 2,396; number taught articulation and speech-reading, 681.

A. E. The general instruction of the pupils is carried on chiefly by the Manual method. Part of them receive special training in articulation and speech-reading. Some of the teachers also use articulation and speech-reading, in addition to the manual alphabet and writing, as a means of instruction with part of their pupils. This is the method of the Kendall and Central New York schools, containing during the year 214 pupils, of whom 190 were taught articulation and speech-reading.

B. Some of the pupils are taught by means of the Manual method, and others by the Oral method. These two classes are

have given some further explanation of the method pursued than is indicated by our definitions, their statements are quoted in foot-notes.

**Minnesota School.*—"It should also be remembered that all of our pupils make trial of articulation, and are dismissed from the oral classes upon the recommendation of the teacher of articulation, and only then when the teacher of articulation decides they are incapable of obtaining an education by the Oral method. Moreover, in class-rooms we lay great stress upon object teaching, writing from actions, and all real combinations of actions such as we are able to produce in the school-room. We resort to this method that the natural sign-language may not be made too prominent. The manual alphabet, writing, lip-reading, and articulation are freely used by the teachers and pupils in the class-room and in social intercourse. We have not yet organized a class in auricular training, although we use quite freely Carrier's ear trumpet with those who are capable of receiving instruction through the sense of hearing. I claim to use every method of instruction that seems to me of service in educating deaf children."--J. L. NOYES, Superintendent.

permitted to mingle freely with one another out of school-hours. This is the method of nine schools, viz., the Virginia,* Tennessee (?),† North Carolina, South Carolina, Alabama, Nebraska, Florida, Ephpheta, and Montreal Catholic Male schools, containing during the year 959 pupils, of whom 277 were taught by the Oral method.

B. C. Some of the pupils are taught by means of the Manual method, and others by the Oral method. Of the latter, part are permitted to mingle freely out of school-hours with the manually-taught pupils; others are kept entirely separate from them, and from those who mingle with them, out of school-hours as well as in the school-rooms. This is the method of the Pennsylvania Institution, containing during the year 494 pupils, of whom 118 were taught by the Oral method. "Manual and Oral," rather than "Combined," are the terms Mr. Crouter prefers to use in describing the methods of the Institution.

C. Some of the pupils are taught by means of the Manual method, and others by the Oral method. These two classes are kept entirely separate out of school-hours as well as in the school-rooms. This is the method of the Montreal Catholic Female Institution, containing (during the year 1889) 165 pupils, of whom 78 were taught by the Oral method.

D. The general instruction of the pupils is carried on chiefly by means of the manual alphabet and writing, without the use of the sign-language. All the pupils receive special training in articulation and speech-reading. This is the method of the Western New York Institution, which contained during the year 171 pupils. Mr. Westervelt calls this "The American Vernacular Method."

E. The sign-language, the manual alphabet, writing, articulation, and speech-reading are all used as means of instruction, by the same teachers and with the same pupils. This method is pursued in six schools, viz., the New York,‡ Le Couteulx St.

* *Virginia Institution*.—Mr. Doyle describes the method thus: "*Manual*. Lessons given to certain pupils by articulation. No *combination* of the two methods." This corresponds to our definition of the "Combined System, B," and we, therefore, take the liberty of classifying it as such.

† *Tennessee School*.—"B covers our method in the main. Some pupils (semi-mutes) in Manual classes of speaking teachers are required to recite orally."—THOS. L. MOSES, Principal.

‡ *New York Institution*.—"All the pupils are taught articulation for one hour daily."—I. L. PEET, Principal.

Mary's, Washington, St. John's Catholic, Mackay, and Manitoba schools. Total number of pupils during the year 648 ; number taught articulation and speech-reading, 551.

F. In addition to one or more of the methods above described, auricular training is given to a part of the pupils in eleven " Combined System " schools, viz., the New York, Indiana, Illinois, Mississippi, Kendall, Kansas, Le Couteulx St. Mary's, Minnesota, Arkansas, Nebraska,* and Colorado schools. Auricular instruction is also made a prominent feature of the McCowen School.

G. Six schools are reported as following the Combined System, but we are not informed as to which of the above subclasses the method pursued belongs, viz., the Iowa, Dakota, Louisiana, New Jersey, St. Mary's, and Fredericton schools. Total number of pupils in these schools during the year, 634; number taught articulation and speech-reading, 91.

The following is a summary of the statistics of the methods of instruction in American schools, including Canada, for the year 1890: †

Total number of pupils.....	9,652
Number in Manual method schools.....	402
" " Oral method schools.....	1,104
" " Combined System schools	8,146
Number taught exclusively by the Manual method	5,730
" " articulation and speech-reading	3,922
Number taught articulation and speech-reading in Combined System schools.....	2,818
Number taught exclusively by the Oral method ‡.....	1,578
" " articulation and speech-reading by the " Combined A " method.....	661
" " by the " Combined A. B " method..	681
" " " " Combined A. E " method.....	190
" " " " " " B " "	277
" " " " " " B. C " "	118
" " " " " " C " "	78

* *Nebraska Institute.*—" Instead of saying that ' auricular training is given to a part of the pupils' in this Institute, please say that part of them are taught by the auricular method." -J. A. GILLESPIE, Superintendent.

† In a few cases, where the returns for the year 1890 were not received, those for 1889 are given.

‡ Not including those pupils of the " Combined A. B " schools so taught, since the numbers of the " A " and " B " pupils, respectively, in these schools are not given.

Number taught by the " Combined D " method	171
" " " " E " " 	551
" " by method not specified.....	91
Number of articulation teachers.....	262
Number of articulation teachers in Oral method schools (including principals).....	105
" " in Combined System schools (not including principals)	157
	E. A. F.

SCHOOL ITEMS.

Alabama Institute.—The publication of a weekly paper, called the *Messenger*, has been begun. It is edited by Mr. Osceola Roberts, a former pupil and an experienced printer.

A bill has been introduced into the State legislature proposing to establish a separate school for the deaf and blind of the colored race. If the bill passes the school will be at Talladega.

Arkansas Institute.—At the October meeting of the Board of Trustees, Mr. John H. Geary, a graduate of the New York Institution, was appointed a teacher; Miss Eudora Williams, formerly teacher of sewing, was appointed matron; Miss Allie M. Gilliam, a graduate of the Institute, was appointed teacher of sewing; and Mr. W. F. Murphy, of Ohio, was appointed foreman of the shoe-shop.

At the November meeting, Miss Belle C. Elmore, a pupil of the articulation class, was appointed pupil-teacher.

The publication of an excellent magazine prepared especially for deaf children has been begun. It is called the "Supplement to the Arkansas Mite," and contains stories and other articles similar to those of the "Raindrop," adapted to the capacities of deaf children of various grades of advancement. The price of subscription is a dollar a volume; each volume contains six numbers. We hope it will meet with such encouragement from other schools as to justify its continuance.

California Institution.—The gymnasium and the cooking school have been placed upon a purely educational basis. Mr. F. K. Smyth has been appointed director of the gymnasium, and Miss M. A. Davis gives instruction in cooking.

The twenty-fifth anniversary of Dr. Wilkinson's connection with the Institution was pleasantly celebrated by officers and pupils on the first of December last. To the opinion expressed by one of the pupils, that Dr. Wilkinson's success in building up such a magnificent Institution was largely due to "the policy of non-intervention in its internal affairs on the part of the State," Dr. Wilkinson assented, and said that "during his twenty-five years of service no director or State official had ever suggested a person to be employed in the Institution, and for this reason he had been enabled to surround himself with faithful and competent assistants."

Chili Institution.—We learn from the Berlin *Blätter* of October 1, 1890, that a school for the deaf was opened in Santiago, Chili, May 1, 1889. The principal is Mr. Andreas Mierzowski, who was trained for the work in Germany.

Cincinnati Oral School.—Miss Mary S. Breckinridge entered the school in September last as teacher of a primary class. She received her training at Northampton.

Colorado School.—Miss Tillie Garman, late of the Iowa Institution, has been added to the corps of teachers. A mattress shop has been added in the industrial department, and it is hoped soon to introduce shoemaking, broom-making, and harness-making.

The School has recently passed through a scourge of diphtheria, but there was no death from it. Two children died of membranous croup, and one of peritonitis, following typhoid fever.

Eastern Iowa School.—Last summer Mr. French found a deaf and blind girl in a small town near Dubuque, and placed her in his school, where she is making good progress. Her name is Linnie Haguewood. She is ten years old, and lost both hearing and sight by spinal fever at one and a half years of age. She is a good-tempered, bright, and pretty child.

Florida Institution.—Mr. Terrell resigned the position of principal last September, and was succeeded by Mr. Wm. A. Caldwell, of the Philadelphia Institution. Miss Kate King,

one of the teachers of articulation, also resigned her position, but is still in the work, having charge of some private pupils in Ohio. No teacher has as yet been appointed in her place.

But a small portion of the deaf and the blind of this State are in school, and it is difficult to get them, owing to the great extent of the State and the consequent trouble and expense of transportation. Mr. Terrell deserves much credit for his labors in building up the school, and by his resignation the profession loses a zealous worker.

At present no trades are taught, but preparations are being made for teaching printing and photography. One secondary purpose in selecting these two industries is to advertise the school more extensively throughout the State. By sending out printed matter and photographs prepared at the Institution, it is believed that more attention will be attracted to it.

The buildings are situated about a mile north of the historic city gates, through which all carriages pass on their way to and from the Institution. There is an artesian well on the place, furnishing an abundant supply of delicious drinking water, and it is distributed by pipes all over the grounds. The facilities for gardening and horticulture are therefore unsurpassed.

Fredericton Institution.—The new building is now drawing towards completion, and will, it is hoped, be occupied early in the new year. It is a handsome structure and the most prominent building on the river St. John. It will afford accommodation for sixty pupils.

Groningen (Netherlands) Institution.—The centennial of the Institution, which was established in 1790, has been commemorated by the publication of its history by Dr. A. W. Alings, the director. The history is entitled *Beschrijving van het Instituut voor Doofstommen te Groningen*, 1890, 8vo, pp. 64. An accompanying lithograph shows the buildings and grounds.

Halifax Institution.—Miss Bateman, an experienced and efficient teacher, takes entire charge this year of the Articulation Department, while continuing the instruction of a blind deaf-mute, Wm. W. Heulin, who, under her skilful training, is

making encouraging progress. Miss Lizzie Foley, of Morristown, N. J., sister of Miss Julia Foley, of the Pennsylvania Institution, has been added to the staff as teacher of the Primary Class.

Horace Mann School.—The beautiful house that has been built for the School was dedicated on the 10th of November last. Addresses were made by the President of the Boston School Board, Mayor Hart, Governor Brackett, the Hon. Gardiner Greene Hubbard, and others. The Dedicatory Hymn, written for the occasion by Miss Alice C. Jennings, a former pupil of the School, is published elsewhere in the present number of the *Annals*.

Ionca Institution.—At the close of the last school year Mr. McDermid retired to accept the principalship of the Manitoba Institution. Miss Sutton transferred her services to the Philadelphia Institution, and Miss Garman went to the Colorado School. The vacancy caused by the resignation of Mr. McDermid has not yet been filled. Miss Olivia Brunning, formerly of the Indiana Institution, was employed as additional teacher of articulation. Miss Margaret Watkins, lately connected with the Nebraska Institute, and Miss Ollie Tracy, a graduate of this Institution, have been appointed teachers of manual classes.

Kentucky Institution.—Miss Frances Barker, of Columbus, Ohio, has been appointed teacher in the colored department. Miss Barker has had one year's experience in the work.

A new building containing chapel, dining-room, wash-rooms, etc., has just been completed at the colored department, increasing its capacity to seventy-five children.

Louisiana Institution.—Mr. Stephen Shuey, a graduate of the Missouri School and National College, has been appointed teacher of a high class recently organized, and also teacher of printing. The regular publication of the *Pelican* has been resumed under his direction.

The blind pupils were removed last August to a separate building.

McCowen Oral School.—The late “Voice and Hearing School” at Englewood, Illinois, has recently been incorporated under the name of “The McCowen Oral School for Young Deaf Children.” The incorporators are prominent business men of Chicago, who have established an endowment fund for its maintenance, in order that children whose parents are not able to pay for their tuition may be admitted. The school will henceforth confine itself more closely than formerly to the education of very young deaf children.

Instruction in Slöjd is now given by a special teacher to all pupils above the Kindergarten class.

Manitoba Institution.—Mr. J. C. Watson, who had been principal for two years, was compelled to resign in September on account of a serious illness, and Mr. D. W. McDermid, late of the Iowa Institution, and originally from the Ontario Institution, was appointed to fill the vacancy. His wife was also elected to the position of teacher.

When this school was organized there was a provision requiring parents to pay for the board of their children. This has been abolished, and hereafter the Institution will be free to all deaf-mutes of school age in the Province. With a compulsory law and a free school, it will not be the fault of the Government of Manitoba if the deaf are not all under instruction.

The new building is now occupied. It is furnished with all modern appliances and conveniences, and affords, on a small scale, comparatively speaking, the comforts of the larger institutions.

Michigan School.—In September last Miss Maggie Bennett was obliged to resign the position of teacher on account of ill health, and the vacancy is filled by Miss Emma Monroe, of Mt. Morris, Michigan.

Minnesota School.—The electric-light plant recently introduced proves very satisfactory. The cost, including two new boilers, an engine, two dynamos, wiring, lamps, etc., was nearly \$8,000.

Missouri School.—Miss Mary N. Kouns, of Jefferson City, Mo., was appointed a teacher in October last.

National College.—The recent publication of “Webster’s International Dictionary” gives to the world the results of long continued and profound investigations by a member of the College Faculty. Professor Samuel Porter is the author of the “Guide to Pronunciation” which fills about twenty of the large pages of the Dictionary, and in conjunction with the Rev. S. W. Barnum has had charge of the general subject of pronunciation. In the “Guide” he treats phonetics thoroughly from the modern physiological point of view. He agrees in the main with Professor Alexander Melville Bell’s system as modified by Professor Henry Sweet, though he differs from them both in some respects.

Nebraska Institute.—A teacher has been added to the aural and oral department. In the aural work those who have come in the last year have increased the percentage of partially deaf in the school, twenty-five per cent. of the pupils now belonging to this class. Whether this condition is peculiar to the State of Nebraska, or whether Mr. Gillespie finds more such cases because he is looking for them, is an interesting question. Twenty per cent. of the pupils of the school may be termed semi-deaf.

North Carolina Institution.—Mr. John C. Miller has been elected teacher in the colored department.

North Dakota School.—The school has a grant of 40,000 acres of land. The constitution provides that it cannot be sold for less than \$10.00 an acre. It is now worth on an average about \$6.00 per acre. The money to be realized from this land is to be held in trust for the school, and the income only to be used. The principal may be increased, but never decreased.

Northern New York Institution.—Mr. Lewis C. Rider has retired from the profession to engage in other work. Miss Mattie P. Harwood has recovered her health and resumed her place as teacher of articulation.

Ontario Institution.—Mr. James C. Balis, late of the Western Pennsylvania Institution, and his wife, Mrs. Sylvia Chapin Balis, have been added to the corps of instructors.

A fine monument of Scotch granite has been erected to the

memory of the late Mr. S. T. Greene by his deaf and hearing friends. On the dedication of the monument a hymn was rendered in signs by Mr. Greene's successor, Mr. Balis, and addresses were made by Mr. Mathison, Mr. Denys, and the Rev. Canon Burke.

Paris National Institution.—The Institution and the cause of deaf-mute education in general have suffered a serious loss in the death of Mr. Ludovic Goguillot, a teacher in this Institution for the past eleven years, founder of the *Revue Internationale*, and author of a valuable treatise on articulation teaching, reviewed by Professor Gordon in the *Annals*, vol. xxxiv, pages 217-222. Mr. Goguillot died of typhoid fever at the early age of thirty-one.

Pennsylvania Institution.—Mr. William A. Caldwell resigned his position late in September to accept the principalship of the Florida Institution. To fill the vacancy thus created Mr. S. G. Davidson, a graduate of the National Deaf-Mute College, and late editor of the *Silent World*, was appointed.

Miss Anna Carter, for two years a valued teacher in this Institution, and formerly in the California Institution, died of consumption in October. She had resigned her position in April on account of failing health. Her associates speak of her as manifesting "a character of beauty and worth, combining intelligence, culture, simplicity, and faithfulness in an unusual degree; a devoted teacher, a warm and sincere friend, and a model Christian woman."

In the latter part of October after a three days' storm the side walls of one of the wings of the Primary Department in course of erection succumbed to the elements and fell in, causing considerable loss to the contractor. The walls are being rapidly rebuilt, and the work upon that and the other departments is progressing rapidly and favorably.

South Carolina Institution.—Miss Mary O. Sherrerd, of Pennsylvania, has been appointed teacher of articulation in place of Miss Eva Ballard, whose death was mentioned in the last number of the *Annals*.

Texas School.—The recent Report announces the following changes during the past year among the teachers: Mr. Simp-

son has been succeeded by Mr. Geo. H. Putnam, formerly of the Minnesota School, and Mr. Thomas by Mr. A. H. Walker, a son of Mr. N. F. Walker, Superintendent of the South Carolina Institution. Miss Alline Kyle, a graduate of Sam Houston College, has been added to the staff. Mrs. E. Begg has succeeded Mrs. Barrett as first matron, and Miss Mary Franks has succeeded Miss Bones as second matron. A page of the report is devoted to the memory of Mr. Felix E. Smith, a valued member of the Board of Trustees, who died on the 5th of February last.

Toledo Day School.—A day school was established on the 11th of September last at Toledo, Ohio, under the auspices of the city board of education. Mr. A. N. Downing, for five years a teacher in the Ohio Institution, took charge of it at first, but he soon afterwards accepted an appointment in the Western Pennsylvania Institution, and was succeeded by Mr. Alfred F. Wood, formerly principal of the Cincinnati Public School.

University of Deseret.—The Deaf-Mute Department is now occupying its new building. It is situated on the University grounds and has cost \$55,000. A boiler-house and shop building costing \$5,000 have recently been erected. The department has now capacity for 125 pupils, and as the percentage of deaf mutes in Utah is large, it will not be long before it will be filled. As this is the only institution between the Rocky Mountains and the Pacific, except those in the extreme northwest, it has a large territory from which to draw. It already receives pupils from Idaho and Arizona, and expects soon to have them from other neighboring States.

Virginia Institution.—Mr. H. M. Chamberlayne, of Virginia, a former pupil of this Institution, and also of the New York Institution, was elected in June to fill the vacancy in the corps of instructors occasioned by the resignation of Mr. Jas. H. Lindsay.

Western New York Institution.—Miss Lizzie A. Buckland, a teacher in the Kindergarten, left in June, to be married in July to Judge B. F. Hastings, of Grant, Nebraska. She is succeeded by Miss Rosa H. Halpin, who thus returns to the position she filled before entering the National Deaf-Mute Col-

lege, where she has been studying for the past two years. Miss Louisa C. Magher has been employed as one of the teachers of the intermediate classes.

Since the opening of the school term in September, Mr. E. Lyon has been teaching his phonetic alphabet to the pupils of all the grades above the fifth for two hours daily. The pupils are interested, and valuable results are hoped for.

E. A. F.

MISCELLANEOUS.

Visitors in the School-Room.—Though Miss Moffat treats “Visitors and their Views” in a lively, cheerful manner in her article in the present number of the *Annals*, she writes, as she herself says, “with laughter that is akin to tears,” and she evidently feels, as do many other teachers of the deaf, that the subject is one deserving serious consideration.

The editor of the *Goodson Gazette* says, in the number for September 20, 1890:

We have been having crowds and crowds of visitors lately, in fact ever since the first day school began. Now, we are glad to see, within the proper hours, people who are really interested in our work here, who come because of that interest, and not to gratify mere curiosity. It never was intended, and *it is not right*, that this Institution should furnish daily entertainment to people who come simply for the novelty of the thing and to see how the deaf and blind behave themselves; whether or not they are like other people, etc. It is not fair to pupils sent here; to the State that appropriates money for their education; to the teachers who teach them, or the parents who do without them, that this school should be broken in upon, interrupted every day again and again just as though it were no school at all, but a free museum, filled with human curiosities, surprisingly wonderful because they have sense, are bright and able to learn.

We do not believe that a school of this kind should be annoyed by visitors any more than any other State school. Many have visited the grounds, etc., of the University of Virginia and the Virginia Military Institute, but who ever entered, as a matter of course, the class or lecture rooms of either place?

West Point belongs to the nation, entirely maintained by public money, yet who visiting there dares enter one of those strictly private lecture halls? No; it is wrong, all wrong, this thing of a school being subjected to daily and almost hourly interruptions from whoever may choose to call.

In the National College ordinary visitors are never allowed to interrupt the work of the class-rooms; in the Kendall

School they are admitted only on one day of the week, Thursday. This latter fact is stated in the Washington guide-books, and visitors seldom apply for admission on other days. We should be glad to know what repressive measures, if any, have been found useful in other schools, and to publish any suggestions that might tend to remedy the evil.

On the other hand it should be remembered that visitors in the school-room are not wholly an evil. Our schools are dependent for their support upon the appreciation and sympathy of the public, and nothing is so effectual in awakening intelligent appreciation and sympathy as a visit to the school-room. The legislators who oppose liberal appropriations for the education of our pupils are usually those who have never visited a school for the deaf, while our warmest friends are always those who, from personal observation, best understand our work. Often, too, as Miss Moffat suggests, the presence of visitors may be made the means of useful instruction to the pupils. We agree with "D" in the *Silent Educator* for December, that usually it is not best to interrupt the regular work of the class when visitors enter the room, and certainly the precious minutes of school should never be spent in merely showing off what the pupils have already learned; but some reference to the visitors, and even allowing them to enter into conversation with the pupils by writing, will sometimes give a pleasant variety to the monotony of the daily routine, and at the same time afford the opportunity for valuable instruction and useful practice in language.

Cultivating the Imagination.—Mr. Blattner, in the present number of the *Annals*, questions the correctness of Miss Porter's opinion, expressed in the July number, that our pupils are lacking in imagination. Another correspondent, while approving of Miss Porter's views in general, says:

One thing I object to, though. The dear soul can never have taught in a western school, or she would not have said "cultivate their imagination." Our pupils have great difficulty in reining in their Pegasus sufficiently to bring it down to the *terra firma* of truth. No; I think most of them are ready now for the graduating class, so far as their imagination is concerned.

"Observations Abroad."—In reply to some criticisms in a review of Mr. Hanson's article in the last number of the *Annals*,

made in the Sienese *L'Educazione dei Sordomuti* for November, 1890, by Mr. D. L. Cappelli, Mr. Hanson writes :

Criticisms are always welcome when made in the courteous manner of those by Mr. Cappelli.

The reviewer questions whether a joke was intended by the boy in the Provincial School at Milan, who wrote, "*Una bella donna è un fiore, ma è velenosa*," believing that he referred to the poisonous plant *Atropa Belladonna*. I think the boy intended to make a joke, because his teacher, upon reading it, was much amused, and, being eager that I should understand it, he translated it at the time into French, rendering "*una bella donna*," "*une belle femme*." If the boy had reference to the plant Belladonna, his instructor would most likely have known it. The teacher may have deceived me, but during my short acquaintance with this gentleman, Mr. Antonio Hecker, I formed the highest respect for him, and think it altogether improbable that he would do anything of the kind.*

Mr. Cappelli says that the question of the superiority of the oral method has been discussed and decided in Italy a thousand times. But no matter how often it may have been decided by those who control the schools, it cannot be conclusively recognized as the best system for all, unless it receives the unanimous endorsement of the deaf themselves, particularly the intelligent ones who are in the best position to judge of its advantages and disadvantages to themselves, as well as the less intelligent of their class. Its superiority for a portion of the deaf may be conceded, but, if I was correctly informed, the deaf in Italy, as well as in Germany, are far from unanimous in adjudging it the best system for all. Will Mr. Cappelli address the following questions to the persons named below, and publish their answers in *L'Educazione*?

1st. From your observations does it appear that those instructed by the pure oral method are as well informed on general topics and have as good mental development as those instructed by the earlier sign and manual method?

2d. Do the less intelligent among the deaf, after leaving school, make practical use of their speech in intercourse with the hearing, or do some of them fall back on writing and signs?

3d. Do you think that all the deaf, including the least intelligent, should be instructed orally, or do you think it would be better to teach some of them by the sign method?

4th. State any opinions you may have pertaining to the subject.

To be addressed to Signor L. M. Jarach, Via Mazzini 38, Torino; Signor Eduardo Armandolini, Direzione Generale della Statistica, Roma, and to his wife; Francesco Micheloni, same address as above; Signor Santino Albinola, Via Solferino 44, Milano; Adolph Bollier, care Mr. Jarach, Turin. Some of these have been educated by the oral, others by the sign and manual methods, and they will, I believe, be recognized as fairly representative of the intelligent deaf in Italy.

*The Milan *Sordomuto* for November, 1890, of which Mr. Hecker is one of the editorial staff, says Mr. Hanson was right in supposing the boy intended to speak of a beautiful lady and not of the plant Belladonna.—E. A. F.

Articles in "Science."—The discussion in *Science* of the marriages of the deaf and their education has continued at intervals during the past quarter. The first five articles were noticed in the last number of the *Annals*, pages 301–303.

6. In *Science* for October 17, 1890, Dr. B. Engelsmann advocates oral instruction. Except the surprising statements that "the sign-language obtained a foothold in this country merely through accident," that "its exponents have sprung from one family here," and that "its advocates are, and always have been, the very ones to fiercely combat every honest attempt to improve the mental condition of this unfortunate class" (semi-mutes), it contains little that would be new to the readers of the *Annals*.

7. In *Science* for October 31, Dr. Philip G. Gillett answers the questions asked him by Dr. Alexander Graham Bell (quoted in the last number of the *Annals*, page 302), as follows:

My advice in such a case as this would be for the young people to examine themselves carefully as to what their motives are in contemplating matrimony. If they have no higher thought than the animal impulse, I would advise them by no means to enter into that sacred relation; but if they are already so united in heart that each is needful to the happiness of the other, I would advise them as soon as their circumstances are such as to enable them to maintain a family in comfort, whether the children should hear or be deaf, to follow the promptings of their higher nature, with a determination to rear their children to respectability and usefulness, which they can do in one case almost as effectually as in the other. Thus one happy union will certainly be effected; while, if prevented, not only would this be estopped, but probably two unhappy, because uncongenial, ones would ensue. If deafness were a crime, or a disgrace, or entailed suffering, I would certainly discourage it; but since it does not, I deem it wise to encourage such a marriage, if the parties most interested believe, after reflection, that their own happiness will be promoted thereby.

Dr. Gillett then proceeds to give his reasons for encouraging the marriage of the deaf; they are substantially the same as those given in his address before the Chicago "Preachers' Meeting," last summer, and quoted in the *Annals* for July, page 231. He concludes:

For the foregoing reasons I have long approved, and still do, of the marriage of the deaf; and I believe that, as a general rule, their intermarriage is more congenial, and productive of more happiness, than the marriage of deaf with hearing persons, though I have known most beautiful and happy unions of the latter kind. "Be ye not unequally yoked together," is a Scripture injunction that bears with as much force upon the deaf as upon any others. That it would be

possible in process of time to generate families who would all be deaf, I fully believe. If the object of matrimony was only to produce human animals, irrespective of their mental and spiritual nature, I should advocate the prevention of the marriage not only of the deaf, but of some other classes who labor under physical defects. But this is not the case. A true marriage is upon a higher and holier basis than this. Its essential element is in the affections of a pair whose perfect union is necessary to their happiness. The happiness of this pair I believe to be of more consequence to themselves and to society than the possible or even probable inconvenience of their offspring. I say inconvenience, for deafness is neither a crime nor a disgrace ; nor does it inflict any suffering on its subject. There was a time when the deaf were considered but brutes, and classed as idiots, and treated accordingly. That time, all are thankful, is passed ; and in our time deaf persons often stand in society the peers of any others, in all that makes true nobility of character and manhood. In education, in mechanical skill, in æsthetic culture, in artistic talent, in true refinement and taste, they are oftentimes above the average of hearing people ; and sometimes the deaf member of the family is the one of all his kindred most entitled to respect, because his deafness, having withdrawn him from his surroundings, has placed within his reach an education and culture that enables him to live on a much higher plane than any of his relations enjoy, and than he would have enjoyed if he had not been deaf. There is in society a vast amount of practical ignorance concerning the deaf, which it seems almost impossible to eradicate. This is one of the heritages handed down from former times, when deafness was indeed a great calamity, consigning its subject to perpetual infancy in law, and to dense ignorance for life. But, as already stated, times have changed ; and what was once a calamity is now only a serious inconvenience. There are other inconveniences that descend by heredity that we might quite as well combat through matrimony as deafness. Baldness is a physical defect that is often a great inconvenience ; but who ever thought of classing the bald-headed among the defective classes, or of regarding baldness as a crime or disgrace ? Near-sightedness is a physical defect that is often very inconvenient ; but who ever thought to trace the pedigree of bald or near-sighted people, to see if they might enter into wedlock ?

8. In *Science* for November 28, Dr. Edward M. Gallaudet calls attention to the fact that there are several classes of deaf persons, some of whom are much more liable than others to transmit the defect to their children. From Dr. Bell's "classification of the deaf into four groups as a guide to marriage" (Minutes of Evidence before the Royal Commission, page 817), he draws the conclusion that with fully one-half of the deaf "there is no more likelihood of giving the legacy of deafness to offspring than with perfectly normal people ; and those who oppose the marriage of the deaf among themselves should give due consideration to this important fact." On the

other hand he does not agree with the views of Dr. Gillett, thinking "he errs radically in characterizing total deafness as 'only a serious inconvenience.'" He says:

Deafness is certainly a grave misfortune, and those in whose person or in whose family it inheres are bound by altruistic considerations to take care that by no selfish act or course of theirs the aggregate of misfortune in the world shall be increased. * * *

Were my advice sought by a young deaf-mute, heart-free, and untrammelled by any engagement, I should say that if he or she could marry, on a basis of sincere affection, one possessed of hearing, such a union would be far more to be desired than one with a deaf partner. Such a marriage as I would recommend first would do much towards taking the deaf partner out of the narrow circle of deaf-mute society, with which the deaf are too apt to be content; it would bring a most important element of comfort and practical assistance to the married pair; it would furnish an essential advantage in the training of the children and in the management of the household. But no argument ought to be necessary to prove that a family where one parent can hear has great advantages over one where both parents are deaf; and in the last analysis the interest of the family must take the precedence over that of the individual, for it is the family, and not the individual, that constitutes the unit of society. Many deaf-mutes think more happiness is to be found in a marriage with a deaf person than with one who hears; but this is by no means as certain as Dr. Gillett, or the deaf themselves, suppose, for it involves a question that has not yet been settled, and may never be. I have known some intermarriages of the deaf to result in wretched unhappiness, but I do not for that reason conclude that such marriages must always, or even often, be unhappy. It is undoubtedly true that some marriages of deaf people with those who hear have turned out badly, but Dr. Gillett's admission that he has known "most beautiful and happy unions of this kind" is a sufficient answer to all objection to such unions; and to his admission I may be permitted to add the testimony from experience, of both a son and a brother, that marriage between the deaf and the hearing may be entirely happy and essentially successful.

But I would not have my deaf friends who have intermarried feel that I am putting them under a wholesale condemnation by urging the union of the deaf with the hearing as the ideal marriage for them. I am perfectly aware that circumstances may arise under which it becomes extremely difficult for a deaf person *not* to take a deaf partner. I am old-fashioned enough to believe in falling in love, even in this mercantile age, and in remaining in love through long years of happy married life; and I should be the last to lay a rude hand on a tie that had grown up between two deaf young people which seemed likely to ultimate in that greatest of Heaven's boons, a marriage of sincere affection. In such a case my friendly advice would be to look well into the causes which made the young people deaf, and ascertain whether there was a family tendency towards the disability or not; and if it appeared that no such tendency existed, or that it was very slight, I certainly should not "forbid the banns."

If, on the other hand, such a condition in the families was disclosed as to render the birth of deaf children probable, a reason for hesitation would surely be recognized which every truly benevolent and unselfish mind would regard as serious.

I have several personal friends who have remained unmarried because of the existence in their families of certain mental or physical defects likely to descend to offspring ; and as I honor them for their unselfishness, so would I rank high in my esteem a deaf person who lived single for a similar reason. But the consideration of this aspect of the question need not be extended ; it can be dismissed with the advice to all young deaf people to look carefully into the matter of " family deafness " before their hearts become entangled with any one, and govern themselves accordingly, remembering all the time that their ideal marriage, because best for the family, is with one who hears.

Dr. Gallaudet also presents at considerable length some arguments in behalf of the Combined System of instruction ; these are for the most part familiar to the readers of the *Annals*.

9. In *Science* for December 5 Dr. Engelsmann briefly calls attention to the New York Institution for Improved Instruction, the Clarke Institution, and the Horace Mann School, as affording persons interested the means of convincing themselves by a visit " that congenital deaf-mutes may be taught to use spoken language correctly by articulation and by writing, without the intervention of any artificial signs."

10. In *Science* for December 19, the Hon. Gardiner Greene Hubbard's address, delivered at the twenty-first anniversary of the Horace Mann School, is published. Mr. Hubbard gives an historical sketch of the circumstances that led to the establishment not only of the Horace Mann School, but also of the Clarke Institution, in which he took the most active part, and which was the beginning of the movement in behalf of articulation teaching in America that has since produced so great results. He pays a fitting tribute to the valuable services to the cause rendered by such philanthropists as Horace Mann, Samuel G. Howe, and Dexter S. King, and to the devoted labors of such teachers as Miss Rogers, Miss Fuller, and Miss Bond ; but the most interesting part of the address is the story of how, when his own little girl lost her hearing at the age of four, and her parents were anxious to retain her speech and carry on her education, they were told by a teacher of the deaf of whom they asked advice that they could do nothing for their child until she was ten years old, when she could be sent to an institution, and that in the mean time her speech and language must inevitably be lost. Certainly no parent would

receive such a response now from a teacher of the deaf, and it seems almost incredible that it should have been given thirty years ago. In view of the change that has taken place in this respect, and the facilities that now exist for oral instruction, and for early instruction, to all of which Mr. Hubbard's persistent efforts in behalf of the Clarke Institution contributed not a little, well may he ask, "Shall we not rejoice that it has been our privilege to work together for this end, and that out of the affliction of a little child a blessing has come to so many?"

11. In *Science* for December 26 Dr. Gillett calls attention to the fact that in his previous article he had not, as might be inferred from Dr. Gallaudet's statement, overlooked the fact that with a large proportion of deaf parents there is no more likelihood of having deaf children than with hearing parents:

The fact was pressed in my article to which the doctor alludes, and, as he plainly shows, has been admitted by Dr. Bell. Dr. Bell's classification is doubtless the most philosophic of any yet promulgated, but whether it will be sustained by future investigations remains to be seen. Science is progressive because of the ascertainment of new truths. Its history shows us that the science of to-day may not be accepted as the science of to-morrow. It is too soon to predicate any positive theories upon the statistics as yet collected. The time during which they have been collated is too short, and their accuracy too unreliable (some being merely hypothetical, and many furnished by indiscriminating parties) to warrant deducing positive opinions from them, or the enunciation of any general law based upon them. The investigations of Dr. E. A. Fay, now in prosecution, will no doubt be of greater value than any preceding.

It is scarcely half a score of years since a really intelligent movement in this direction was inaugurated by Dr. Alexander Graham Bell, a philanthropist as well as an eminent scientist and inventor. Statistics relative to the deaf had been taken previously, to some extent, in several institutions, but the inquiries for them had not been general. Statistics supposed to be reliable at the time of taking them, were, by subsequent inquiries, which developed new or additional facts, materially changed so that former deductions were necessarily reviewed and discarded. One man's lifetime is too short, and his observations too limited, to furnish data upon which to predicate the formulation of a general law. Dr. Bell may have discovered a law governing the offspring of the congenitally deaf persons, or he may have formed an assumption. I think there is as much evidence going to show that an inherent predisposition to deafness exists in some families (using this term in its extended sense), but that it expends its force in a particular line while it remains in others, as to show that it perpetuates itself from parent to child. Within my observation there have been more cases of deafness among children only one of whose parents was congenitally deaf than among those both of whose parents were congenitally deaf. I am not certain but that the percentage of the former would also be found less if careful investigation

was made. Statistics could be so presented as to show that the intermarriage of the deaf tends to reduce the number of deaf children more effectually than for the congenitally deaf to marry the hearing, or persons whose deafness was acquired after birth, since by the latter means there is more probability of scattering the infirmity than there is in intensifying the predisposition to it by the former. It is undeniable that this predisposition is not obliterated by marriage with one who has it not; hence Dr. Gallaudet's ideal marriage of the congenitally deaf with the hearing, or Dr. Bell's suggestion that they marry the non-congenitally deaf, if there is any truth in the law of heredity, will most tend to increase the number of the deaf; because, where two persons in whom inheres the probability of having deaf offspring intermarry, there can result only one family of deaf children, whereas, if they marry hearing or non-congenitally deaf persons, two such families may result.

If the congenital deaf-mute must have so much solicitude for his offspring as Dr. Bell and Dr. Gallaudet insist on, shall the hearing person or the non-congenital deaf have none for his? The deaf man or woman has the same right to exercise his judgment in the selection of a partner for life that any other person has. If they desire to compare their family histories with reference to inherent predisposition to deafness, I know of no one who could object, or of no reason why they should not do so, and not as much as that they and all others should consider a phthisical, scrofulous, or cancerous family diathesis. Dr. Gallaudet's argument with reference to the marriage of the deaf with the hearing is good, but is quite as forceful on the other side of the question. Both parties to a marriage have an equal right to forecast the future. No one will deny that a family where one parent is deaf suffers greater disadvantage than one where both parents can hear. Unless there is sincere love between the parties, the hearing person will not enter into such a marriage. A question of this kind is not to be considered from the stand-point of the deaf alone.

Dr. Gillett still maintains that "deafness may properly be termed only a serious inconvenience," and cites striking instances in which, instead of a calamity, it has proved to be a stroke of good fortune in giving the opportunity for higher mental and moral culture than would have been attained without it. He urges the importance of teaching the deaf to regard themselves, not as belonging to a special class who are to be looked after by others, but as standing upon the same plane as others, and under obligation to provide for themselves as others do; "and that, being handicapped with the inconvenience of deafness, they must expect to do a little better than others do in similar walks of life, and thus make themselves desirable to employers." To characterize deafness as "a calamity" or even as "a grave misfortune," he thinks, tends to promote among the deaf the feeling of class separation and dependence, and therefore is objectionable.

is a proportion nearly thirty times as great as the percentage of deaf persons in the whole population. He continues :

Nor must it be forgotten that Dr. Gillett's percentage is taken upon the whole of the deaf-mute population (which, of course, includes children and unmarried adults); whereas the deaf offspring are the products of the married couples alone. Indeed, as President Gallaudet points out (*Science*, Nov. 28, p. 295), they are chiefly the offspring of couples in which one or both of the parties were *born* deaf, or come from families containing more than one deaf-mute. Sporadic deafness (if not congenital) is rarely inherited, and the majority of the marriages of the deaf are free from deaf offspring. How prolific of deaf offspring the remaining marriages must be, if their children alone constitute a percentage of the whole deaf-mute population nearly thirty times as great as the normal percentage for the country!

Dr. Bell complains of the indefiniteness of Dr. Gillett's statement in "Facts and Opinions" that "of 1,886 deaf-mutes admitted to the Illinois Institution, 293 were known to have married, and that among these only sixteen have deaf-mute children," and asks for further particulars, such as "the number of families having deaf children, the number of deaf children, what percentage of the offspring were deaf and what hearing," and, especially, "what percentage of the children were deaf in those cases where the married partners were both deaf from birth, and in those cases where both had deaf relatives." He also calls attention to the fact that these 1,886 deaf-mutes included the pupils who were then in school and maintains that "if you take an equal number of marriages of hearing people there should not be one deaf child among the offspring." He regards Dr. Gillett as inconsistent in maintaining on the one hand that deafness is not so great a calamity that persons should be deterred from contracting marriages likely to result in deaf offspring, and on the other that it is so great a calamity as to cut the deaf off from almost everything in life worth living for. He says that he does not propose to forbid the deaf to marry, and that his position upon the subject is substantially the same as that taken by President Lincoln.

[illegible]

A Taste for Reading.—Much has been said in the *Annals* and elsewhere of the importance of cultivating a taste for reading in our pupils, and various means for accomplishing this have been suggested. The following has been found successful in the New Jersey School; we quote from the *Silent Worker*, of November 27, 1890:

A story is told to the pupils, in outline, as an evening exercise, two or three times a week, by means of the finger alphabet. If the pupils are much interested in it they will ask for the book. If the demand is general the book goes down on the list for the next month's purchases. When it comes, it is in eager demand, and is read by many who would not have cared to read it but for the knowledge of its contents gained by the explanation given in the chapel lectures. Among the books introduced in this way are Ben Hur, The Prince and the Pauper, Little Lord Fauntleroy, The Black Arrow, Tales from Shakespeare, and others of similar type.

Puzzles and Jokes.—A correspondent writes:

I enjoyed Mr. Caldwell's article in the October *Annals* very much, for I have given pupils puzzles and jokes for years, but I told "it not in Gath nor published it in the streets of Ascalon," lest the orthodox should empty upon me the vials of wrath, or forbid my doing it.

Mr. Caldwell is not the only one who has had trouble with *niece* and *piece*, but I remedied the difficulty by teaching the phrase—"a *piece* of *pie* for my *niece*," *pie* being the guiding word.

I think that if newspaper jokers were to teach a class of deaf-mutes, they would find fresher and brighter materials than they use now. Here are a couple of my latest:

"Tell me the name of some *domestic* animal." "Sewing machine."
 "What?" "Yes, true! my mother has a Domestic."

Again, we were discussing the words "A velvet-skinned peach;" and I asked (thinking of a chestnut), "Did you ever see a nut with a shell like satin?"

"NO! Satin's down in Hell." I cannot reproduce on paper the indignant emphasis of the word NO! nor the scorn with which the child repelled the idea of having *seen* his Satanic Majesty.

Report on Methods of Instruction.—It is proposed to establish a school for the deaf of North and East Lancashire, England, and in September last a committee of gentlemen interested were deputed to visit London to inquire into methods of instruction. On the invitation of Mr. Lionel Van Oven, a member of the recent Royal Commission and a zealous adherent of the oral method, they visited in company with him the Capland-Street Board School, the School and Training Col-

lege under the direction of Mr. Van Praagh, and the Jews' Home. Three members of the deputation also visited the Margate School. The committee unanimously reported as follows :

AUTHORITIES CONSULTED.

We discussed the advantages and disadvantages of the pure oral system with Mr. L. Van Oven, Mr. Van Praagh, Mr. S. Schöntheil, the Rev. Dr. Stainer, and Dr. Elliott. The first three gentlemen are enthusiasts; they have probably done more than any other three to introduce pure oralism into this country. Mr. Van Oven believes in the universal application of the pure oral system, and its superiority over every other system for all deaf-mutes. Mr. Van Praagh, who holds the same views, has taught on the pure oral system in England since 1867, and he does not know the manual alphabet. Mr. Schöntheil, who also agrees with his countrymen as to the universal superiority of the pure oral system, has been head teacher at the Jews' Home for nearly nineteen years, and has had very little experience of deaf-mutes taught on the finger and sign system. Dr. Stainer, who has had forty-nine years' experience among the deaf and dumb, believes in the superiority of the pure oral system plus the finger alphabet, but declares that the conditions required for its successful teaching are impossible conditions. He says that the pure oral system requires one teacher to a pupil, unlimited time and means, that pupil never to see another deaf-mute as long as he lives, and that with all these conditions the pupil will not be able to engage in "ordinary conversation" with the hearing world. Dr. Elliott is a convert to the general superiority of the oral system, but thinks with Dr. Stainer and other authorities that there will always be a considerable percentage of deaf-mutes who will require to be taught by the silent system.

RESULTS.

We saw one deaf gentleman and one deaf lady who can engage agreeably in what might reasonably be called ordinary conversation. The gentleman was an ex-pupil of Mr. Van Praagh's who had had every advantage that money, time, and good teachers could afford. The lady is a teacher in the sign department of the Margate Institution, and was taught there on the combined system. She lost her hearing when about eight years of age, but has learned lip-reading thoroughly, and retained her speech. We saw three other ex-pupils of Mr. Van Praagh's whose articulation may fairly be called speech, and whose lip-reading in conversation on simple subjects was very fair. At the Jews' Home we saw an ex-pupil of Mr. Schöntheil's, who could speak and lip-read on simple subjects with facility. In the first two cases we consider the results excellent: in three out of the other four very satisfactory.

In the first class of Mr. Schöntheil's school, consisting of three bright girls and two boys, we saw most intelligent lip-reading, and evidence of patient teaching of the highest excellence. The senior pupils at Fitzroy Square were able to receive religious instruction on simple and familiar subjects from the lips of Miss Ferrier, who is a very excellent teacher. In a reading lesson for the most advanced of these pupils conducted by

Miscellaneous.

... were seriously disappointed, and we were also disappointed in the ability of the pupils to engage in conversation with us on the simplest subjects. These results were the best we saw at the oral schools, and they were only attained by the brightest pupils. Some of the results we saw were indifferent, others bad. The best results in the Board School, where the conditions are the same as at Fitzroy Square and the Jews' Home.

The writing and speech we saw and heard at Margate were almost equal to the best we saw at the pure oral schools, and we were convinced that there is no disadvantage to the oral pupils in being allowed to associate with the sign-taught pupils after school hours. The pupils are equally well taught at Margate in both departments. The lessons are conducted both orally and by signs.

PURE ORALISM.

Dr. Stainer was right when he told the Royal Commission that oralism is an idea, not a reality.

The Board School children converse in the finger and sign language in the playground. This is denied; but Dr. Stainer, who is superintendent of the Board School children in London, assured us that the children invariably talk on their fingers to one another when out of the playground, and never by word of mouth.

The finger alphabet is not supposed to be known at Fitzroy Square. The manual method is admittedly used in the earlier stages of instruction; lip-reading is discouraged.

Signs, and at least one conventional sign, were spontaneously and extensively used by the ex-pupil produced by Mr. Schöntheil, who was a good speaker and lip-reader, and spoke the words at the same moment as she gave the signs. She is employed as a domestic servant in a household.

The pupils at Margate know the finger and sign language.

Dr. Stainer advocates the teaching of the finger alphabet to all oral pupils when they leave the school.

CONCLUSIONS.

Oralism is 1) "An idea, not a reality;" (2) a useless task to the majority; (3) unsatisfactory for a large number of pupils; (4) entirely impracticable only in exceptional cases, and under conditions that are impracticable, and often impossible.

Sign and lip-reading are nevertheless so advantageous to the deaf that all who are capable of acquiring it ought to be taught by the sign and lip-reading system. About 25 per cent. can be more advantageously taught by the sign and manual method. We, therefore, conclude that a dual system is a necessity.

Sign and lip-reading can be taught as well under the dual system as under the so-called pure oral.

All pupils ought to know the finger alphabet, though it need not be taught in the oral classes.

We have previously resolved to adopt "the most approved form of the sign system," and to give "all the advantages of an oral train-

ing to those deaf-mutes who are capable of receiving it, without excluding the natural language of signs." After visiting the best oral schools in this country, our opinion is that a dual system, as defined below, will answer all requirements, and we recommend that this system shall be taught in our school :

(1) Give every child a year's trial in the oral department of the school, as recommended by the Royal Commission.

(2) At the end of twelve months remove those to the sign and manual department whom the head master thinks can be best taught there, as also recommended by the Royal Commission.

(3) Grade oral pupils thoroughly and periodically, allowing one teacher not more than ten pupils, and providing a separate teacher for four or five pupils in case of necessity.

(4) Teach speech by lip-reading and auricular methods, each child being medically examined and treated according to his special qualifications.

(5) Allow oral pupils to associate with the sign-taught pupils in the play-grounds, etc. This is not hurtful, but beneficial.

(6) Arrange the school in recognized standards, and give the same lessons in language, and in general and religious knowledge, in both departments.

JNO. GEO. SHAW.

J. DUTHIE.

T. COOKSON.

J. D. HARRISON, *Hon. Sec.*

PRESTON, *Sept.* 29, 1890.

Occupations of the Deaf.—In the paper on "Some Results of College Work" read before the Convention of Instructors in New York, which is also printed in the last Annual Report of the Columbia Institution, Professor Draper gives the following table of the occupations of the eighty-nine young men who have been graduated from the National College :

Unascertained at this writing (of whom one died soon after graduating).	4
Foreman of a daily newspaper	1
First assistant postmaster of a city, and editorial writer.....	1
Clerk to a recorder of deeds	1
Official botanist of a State	1
Deputy recorder of deeds in a leading city.....	1
Teachers.....	34
Teacher, and principal of a leading institution	1
Teachers, and founders of schools.....	5
Teacher, founder of a school, and principal of an institution	1
Teacher, principal of a leading institution, authority in microscopy, merchant in iron and steel	1
Teachers, and editors of papers for the deaf.....	4
Assistant professors in the College.....	2

1. State the problem.

.....	1
..... and teachers..... .. .	4
..... and teacher.....	1
..... custom-houses, and post-offices.	8
..... newspapers, and general printers .	2
.....	1
.....	2
.....	1
.....	1
.....	1
.....	1
.....	1
..... among the deaf..... .. .	3
.....	1
.....	1
.....	2
..... and flouring business.....	1
.....	89

At the Kansas Institution Mr. Walker
has a complete table of the occupations of

1	is a barber.
1	is a shipping clerk.
1	is a clerk.
3	are housemaids.
2	are teachers.
1	is a stone mason.
1	is a dairyman.
1	is a Government clerk.
1	is an editor of a Kansas news- paper.
1	is a tailor.
1	is a coal miner.
1	is a miller's assistant.

Marriages of the Deaf.—Dr. Alexander Gra-
ham has drawn attention to the interesting fact that the late
Dr. Erasmus Darwin considered the marriages of deaf-mutes as un-
natural, and hence constituting an ex-
ception to the general rule. He says in "Animals and Plants
Economically Considered," vol. I. chapter xii, pages 465, 466 :

Although several deaf-mutes often occur in the same family, their cousins and other relations are often in perfect hearing. Their parents are rarely deaf-mutes. To give a

single instance: not one scholar out of 148, who were at the same time in the London Institution, was the child of parents similarly affected. So again, when a male or female deaf-mute marries a sound person, their children are most rarely affected: in Ireland, out of 203 children thus produced, one alone was mute. Even when both parents have been deaf-mutes, as in the case of forty-one marriages in the United States, and of six in Ireland, only two deaf and dumb children were produced. Mr. Sedgwick,* in commenting on this remarkable and fortunate failure in the power of transmission in the direct line, remarks that it may possibly be owing to "excess having reversed the action of some natural law in development." But it is safer in the present state of our knowledge to look at the whole case as simply unintelligible.

How Sicard Exhibited his Pupils.—Mr. Douglas Tilden sends us the following from Paris:

An article in the *Deaf-Mutes' Journal* for Nov. 27, 1890, reminds me of a conversation I had not long ago with Mr. Joseph Theobald, of Paris, on the subject of Sicard's show pupils. Mr. Theobald is quite an elderly gentleman, and used to know the old pupils (however, not Clerc and Massieu) who took part in Sicard's exercises, or at least knew how they were conducted.

One method of Sicard's was this: He beforehand coached his pupils on divers topics, such as charity, gratitude, etc., and at the exhibition he distributed sheets of paper among the audience and requested them to jot down such questions as they would like to ask the pupils. After collecting them, he would, in full view of the audience, silently read the papers one after another, and then suddenly pause and read aloud, as if from the paper, "What is charity?" and then, turning to the pupil, give him the same question in signs. There was no such question on the paper, and perhaps there was nothing on any of the papers that the pupils could write about successfully. The audience, seeing the honest priest reading aloud from the paper, concluded therefrom that somebody among them had written that question. So the delusion was complete.

For fear the papers might fall into other hands, Sicard put them, as the exhibition progressed, under the scarf that is worn around the body as we see it in the statue of the Abbe de l'Épée.

Laura Bridgman's Brain.—The *American Journal of Psychology* for September, 1890, contains an anatomical study of Laura Bridgman's brain and sense-organs, by Professor H. H. Donaldson, of Clark University, the object being to determine, if possible, whether her peculiar mental existence, which was the result of her defective sense-organs, left any trace on

* *British and Foreign Med. Chirug. Review*, July, 1861, pp. 200-204. Mr. Sedgwick has given such full details on this subject, with ample references, that I need refer to no other authorities.

cases as might be observed
 considered as the direct con-
 sideration. Professor Donaldson
 in the examination of the
 Solar as appears in the pres-
 ent on the average human brain
 been expected, there was evi-
 dence of the speech and sight
 development. The weight
 the average, which may also
 development. The subject is
 article.

Farrar informs us that Mr.
 set's "Analysis of the Letters
 to Speak," mentioned in the
 87, is now printed and ready for
 has not yet reached us, but we
 commend a book so well known.
 volume contains an elaborate
 valuable matter never before
 library of every teacher and
 teachers and schools that have
 the formation of one by ob-
 awarded to any address in the
 dollar, which may be sent by
 Farrar, Jr., The Grange, Beech

—In response to the suggestion
 the *Journal* of last July and at
 sum of \$102.10 has been con-
 toward the proposed statue of
 contributors were Alexander
 Isaac Lewis Peet, M. T. Gass,
 A. L. E. Crocker, D. Greenberger,
 W. Wilkinson, and R. Mathison.

—Mr. Brown, of Union Hill, Nel-
 ished a valuable contribution

to historical knowledge, entitled "The Genesis of the United States." (Houghton, Mifflin & Co.) It is in two large octavo volumes, and contains a series of historical manuscripts now first printed, together with a reissue of rare contemporaneous tracts, accompanied by bibliographical memoranda, notes, and brief biographies. The work was begun in 1876, and, as the author says in his preface, has been a long, laborious, and expensive task, obliging him to practise every self-denial and to overcome difficulties which would have baffled many men.

The special interest of the work for the readers of the *Annals* lies in the fact that Mr. Brown is, and has been for several years, totally deaf.

The Growth and Progress of the Schools.—The growth and progress of the Schools for the Deaf in the United States since the establishment of the first school in 1817 may be seen from the following table, which is compiled from some of the tables that have been published within this period:

YEAR.	Number of Schools.	NUMBER OF PUPILS.				NUMBER OF INSTRUCTORS.				
		Total.	Male.	Female.	No. taught articulation.	Total.	Male.	Female.	Deaf.	Articulation.
1817.....	1	12				2	2			
1820.....	3									
1830.....	5									
1840.....	6									
1850.....	12	1,148				66	63	3	24	
1860.....	22									
1866.....	26				5					1
1870.....	34	3,784	2,132	1,652		222	134	87	94	
1880.....	55	6,798	3,908	2,890		425	203	222	132	
1883.....	58	7,169	4,013	3,156	1,991	497	213	284	151	112
1890.....	77	8,572	4,846	3,726	3,402	601	248	353	168	182

Reports.—We have received since the last issue of the *Annals* the Reports of the Alabama, Columbia, Genoa, Kansas, Pennsylvania Oral, Texas, and Victorian Institutions, published in 1890; also the Fourteenth Report of Church Work in the Mid-Western Dioceses, and the French Report of the International Congress of Deaf-Mutes held in 1889.

E. A. F.

world over, has the same form, the same structure, the same physical and mental peculiarities, differing sometimes in degree, but never in kind. The homogeneity of the human family is not only a fact now, but so far back as we go in the history of the world, reading inscriptions on altars, pillars, triumphal arches, and tombs, studying the testimony of the rocks, and all that archæology has revealed to us of the remote past, the identity of man with his primitive ancestors is one of those indisputable facts upon which science may be said to be agreed. Professor Rudolph Virchow, of the University of Berlin, in an elaborate article on "Anthropology in the Last Twenty Years," maintains that the investigation of pre-historic lake dwellings and caves reveals to us men whom we need not be ashamed to recognize as brothers. After studying the different types of man in ancient Egypt, the professor exclaims, "Thus the permanence of types, for 3,500 years, is assured."

Without raising the question of the origin of the present permanent races of mankind, we find that this law of uniform transmission stamps upon one race its peculiar color and physiognomy, transmits to another its stature, and to another characteristics of hair and eyes; so universal are these facts that mankind have embodied the result of their observation in the familiar proverb that "Like begets like." Nor is man's physical nature the only thing inherited; of hereditary genius there is no question, and the transmission of man's moral nature is one of the well-beaten truths of theology. Modern instances of a predisposition to crime are seen, not only in the four hundred and nineteen families connected by marriage in Indianapolis who have become notorious for their criminal propensities, but also in the more numerous Jukes family, consisting of twelve hundred persons, whom Mr. Dugdale, of New York, has traced to a common ancestor—a family that has cost the State thousands of dollars, and which has been found for several generations in all grades of the delinquent and dependent classes.

There is, however, another principle, just as pronounced in its operation, and as impossible to control, as the law of uniform transmission. This is the law of diversity. It has been clearly shown by Mr. Darwin that the tendency to vary is itself hereditary, and every new generation but intensifies the habit to deviate from the original stock. The more extensively this tendency has occurred in the past, the more certainly will it

any reason to believe
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 ning a consciousness
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 language free from a
 on any such assumption
 is this tendency deeply
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 selection and what are
 tendency is further increased.
 quality possible. Absolute
 an end to all human society.
 unity are principles run-
 life. The deviations from
 occur are of so strange and
 all scientific explanation. "I
 sician, "asked myself the ques-
 deformed rustics and females of
 ravishing beauty should arise
 that principle of heredity can be
 in a family of normal parents of
 four sons of average stature?
 and its transmission for a century?
 orcupine man? for the seven chil-
 position to suicide all taking their
 years of age? for three and four
 mia? for the presence of supernu-
 others marrying two sisters and the
 es being albinos? for all the mon-
 developments which are constantly
 of organized life? Darwin's chapter
 ds and Plants Under Domestication"
 he many inexplicable variations which
 mission of human life.

already said it will be seen that there
 to the number of varieties. The word
 riters sometimes as equivalent to race or
 individuals. In speaking of a deaf-mute
 it is that, by the intermarriage of deaf-
 time, a race will be formed which shall
 generation after generation, just as the
 now transmit their characteristics. It



is one answer to this theory to say that never in the history of mankind has natural selection propagated a defect. It is true that selection, by which the fittest are born, and natural selection, by which the fittest survive, have both failed as to man. Man cannot be governed in his selection as animals are controlled, and all analogies from the lower animals to prove the possibility of a deaf-mute race are not pertinent when applied to man, for in him the tendency is to fixity and to increased homogeneity. Even granting that the present races and sub-races of men have been evolved from some fortuitous variation under the influence of natural selection, the process has been accomplished so silently as to be altogether imperceptible; but that a variety should be originated *per saltem* is inconceivable. There is no differentiating mark among the deaf which is exclusively theirs. A great number of the blind, the insane, and the idiotic are also deaf, leaving the so-called variety without any distinguishing attribute. Again, the number of sporadic cases of deafness is so overwhelmingly large, compared with the number afflicted with hereditary deafness, that there is no real comparison between the two classes. If otter sheep, polled cattle, albino mice, and pouter pigeons were produced in greater numbers from scrub stock than by artificial selection, there would soon be an end to fancy prices for special breeds, and to the stock itself. No man would waste time and money to perpetuate breeds of cattle if there were a constant supply at hand, and this would be especially true if the breed selected could not be depended upon to produce more than five to ten per cent. of the desired variety. Speaking on this subject, Darwin says: "When from the nature of the organism and other conditions modifications are induced which are unimportant for the welfare of the species, they may be, and often are, transmitted in nearly the same proportion to numerous otherwise modified descendants." Wallace, commenting upon this, maintains that "such varieties are unstable and are constantly reproduced in varying proportions: they could never become species unless the variation in question be beneficial, when it is fixed by natural selection."

In all artificial or methodical selections it is a matter of common experience that the result of fortuitous variation in one generation is equal to the result of disuse in a thousand. (Wallace, "Darwinism," p. 435.) Leicester sheep have been bred with most scrupulous care for more than a century, yet

black sheep occasionally appear. Were it not for the rigid exclusion of these black varieties, the white-fleeced Leicesters would soon come to an end. From polled cattle of long pedigree horned individuals are occasionally found, so impossible is it wholly to overcome the principle of reversion. Not only is the raising of a new breed dependent upon the most precise and methodical selection, but the process must be under one controlling intelligence. Two gentlemen, Mr. Buckley and Mr. Burgess, both undertook to raise Leicester sheep. It is affirmed that these gentlemen have not deviated in any respect from the true blood, but the two sets of Leicesters present all the appearance of two separate breeds. Dark-colored pigeons from time to time produce single white individuals, and this is also true of rabbits. If after the most careful and methodical selection and isolation it is impossible to kill the tendency to revert to the original type, how could it ever be possible among individuals, where artificial selection is impossible, where there is no distinctive character to be bred for, where the caprice of human volition enters into the problem, where there is constant admixture with individuals possessing some degree of hearing and there exists a general suspicion of those whose deafness is more than a generation old, to evolve a race which shall overcome the excess of inheritance from millions of preceding ancestors? All the analogies of human generation and all the teaching of evolutionary science declare this to be impossible. There are some things that defy transmission. The crested canary and certain poultry cannot be reproduced. Upon statistics presented by English schools Mr. Darwin classes deaf-mutism as one of the things not inherited. That deafness is found in the third and fourth generation of a few families is unquestionable, but all that has been observed and chronicled of the deaf can be paralleled by facts of a much graver character. Insanity is known to be hereditary; the percentage varies, but at some places it has been found to be as high as sixty-five per cent. The Census of 1880 revealed the fact that out of 6,250 responses to circulars of inquiry in regard to the insane it was found 3,885 persons had relatives similarly afflicted, and out of 9,000 responses from families where idiots are found 4,481 reported relatives similarly defective. Not the least alarming note of the Census of 1880 was the appalling fact that thirty-eight per cent. of the insane and 4,170 idiots were married. Serious as the fact may be, the

is one answer to this theory to say that never in mankind has natural selection propagated a deafness, by which the fittest are born, and, by which the fittest survive, have both failed. Man cannot be governed in his selection as a dog, and all analogies from the lower animals to the possibility of a deaf-mute race are not pertinent to man, for in him the tendency is to fixity and homogeneity. Even granting that the present races of men have been evolved from some form under the influence of natural selection, the change has been accomplished so silently as to be altogether imperceptible, that a variety should be originated *per saltu*. There is no differentiating mark among the deaf and the exclusively theirs. A great number of the deaf and the idiotic are also deaf, leaving the deafness without any distinguishing attribute. Again, the number of cases of deafness is so overwhelming when compared with the number afflicted with hereditary deafness, that there is no real comparison between the two classes. As in the case of polled cattle, albino mice, and pouter pigeons, in greater numbers from scrub stock than from the best, if selection, there would soon be an end to the breeds, and to the stock itself. No money to perpetuate breeds of cattle, and no supply at hand, and this would be especially true of the selected could not be depended upon for more than five to ten per cent. of the desired result. On this subject, Darwin says: "When from the influence of domestication and other conditions modifications of structure, which are unimportant for the welfare of the animal, are often transmitted in nearly the same form, and thus, in successive generations, otherwise modified descendents, upon this, maintains that "such modifications, if constantly reproduced in various forms, never become species unless they are artificial, when it is fixed by nature."

In all artificial or methodical selection, common experience teaches that the change in one generation is equal to the change in the next. (Wallace, "Darwinism," p. 40.)
bred with most scrupulous

of certain nerves—was not inherited, “but the resulting epilepsy, or a general state of weakness, deformity, and sores, was sometimes inherited.”* Dr. Weismann discusses other cases of the supposed inheritance of acquired factors, and shows that all can be explained in other ways. In the case of deaf-mutes I do not know of a single family where deafness can be traced for seven generations, and of those noted deaf families now living nearly every one can follow the inception of the infirmity to some acquired defect. But before discussing the influence of disease in propagating deafness, there is a modern example of an endemic affliction which has also been attributed to heredity. In certain Alpine districts there has been generation after generation of cretinism and goitre. The majority of these cretins are deaf-mutes. That intermarriage should render the people of these districts more susceptible to the affections common among them is beyond question, but it is now discovered that removal from the afflicted districts puts an end to the transmission of the defect, and the introduction of pure living water into some of those places has been followed by immunity from the disease. The keenness of the Indian in pursuing a trail was also attributed to the influence of heredity, but white trappers in one generation have proved themselves equal to the skill of the Indian. Missionaries in leper districts are trying to rescue the children of lepers, for they find that the disease results not so much from heredity as from contact. Freeing the children from this danger, prevention is possible. These facts are especially pertinent in the discussion of hereditary deafness. Of the influence of disease in transmitting this misfortune there is plenty of evidence. The most clear and philosophical statement of the case I have been able to find is the following: “The power of organisms to transmit their properties to their offspring appears to me to be only conceivable in such a manner that the germ of the organism by its chemico-physical composition, together with its molecular structure, has communicated to it a fixed direction of development.” (Dr. Weismann, “Theory of Descent,” p. 667.)

There are far more people afflicted with deafness than is generally supposed. Normal hearing is as rare as total deafness, and between the two extremes there are all possible

* Wallace on Darwinism, p. 441.

degrees of audition. Yet, notwithstanding the prevalence of deafness, the chances of its transmission are very remote. "Let it be assumed," says Darwin, "that in a large population, a particular affection occurs on an average in one out of a million. Let the population consist of sixty millions, composed, we will assume, of ten million families each containing six members. On these data, Professor Stokes has calculated for me the odds that there will be no fewer chances than 8,333 millions to one that in the ten million families there will not be even a single family in which one parent and two children will be affected by the peculiarity in question." (Darwin, "Animals and Plants under Domestication," vol. ii, p. 14.) If we read *thousands* for millions in the above quotation, we have an analogous case to the condition of the deaf in the United States, and the computation is interesting as revealing the enormous odds against the transmission of deafness through the general population. There are, however, certain districts in the United States where deafness may be said to be endemic. The facts gathered in support of the theory of a deaf-mute variety are mainly from these localities.

The problem of hereditary deafness becomes very much complicated when we come to inquire into the causes of it. In some of its aspects it is like discussing hereditary cough: both are the result of a great number of possible physical states. Speaking popularly, I find that deafness may be caused by some malformation of the tubes, bones, muscles, membranes, or nerves of the ear; it may result from obstruction of the external ear; from thickening, perforation, or inflammation of the membrana tympani; from ulceration of the middle or internal ear; from some obstruction in the eustachian tube; from an abnormal arrangement of the three thousand minute fibres lining the cochlea, which fibres are the terminations of the acoustic nerves; concretions of wax may block up the external meatus; the presence of polypi may render audition impossible; the external ear may become hypertrophied as in idiots; or the auditory fluid may become charged with bloody matter and the vibratory action so necessary to distinct hearing may be thus destroyed.

Of specific causes producing these various irregularities, we find that locality, consanguinity of parents, a strumous and delicate habit of body, accidents, and mental impressions on the part of the mother before the child is born, have all of

tion of deafness. Hereditary deafness to different types, due to deviation from the norm as it is moved. Change of environment, of generations, giving rise to different types of health, would not affect the constitution, and the deafness would be removed. The afflictions which cause deafness not only have no hereditary transmission, but the effects are not permanent. The effects of deafness are not permanent, but the effects of deafness are not permanent. (Dr. Flam, "A Physician's

view of congenital deafness, first in importance are scrofula and congenital delicate habit of body is the cause." (Dr. Harvey, Encyclopedia of Deaf and Dumb.") The reports of the New York Institutions show that 10 per cent. of the pupils have lost one ear before coming to school, "a sure sign," says Dr. Harvey, "of feeble constitution." One-third of the pupils under the care of the writer were in the same condition. It is also, also, that the deaf are as prolific in children as the hearing people is far from correct. Of the more than 100 marriages of the pupils of the American Institution, forty-five per cent. have been without issue. It is well known that long among the deaf cannot fail to find the prevalence of suppurative ears, of skin diseases, erysipelas, affections of the glands and tonsils, and a diathesis sufficient to account for this deprivation. Information presented to the British House of Commons in 1844 led to no doubt that scrofula is responsible for a large number of cases of deaf-mutism, seventy-five per cent. of the cases in this country being attributed to this cause. ("Papers of the Deaf Mutes," p. 62.) A number of years ago Prof. Samuel Porter, now of the National College at Washington, made a careful study of the relation of scrofula and deafness. He found that out of 92 started from the four of the German schools there were 39 known to be from consumption; of the 20 deceased pupils of the



10

Deafness.

11

12

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14

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of the lungs. In 84 known
of the American Asylum he
of consumption and other lung dis-
of Convention of American In-
of taking note of the prevalence
of New England, and I am
of which I hear of one and
of the pupils in the last grad
of parent by consumption, and
of reported as afflicted with it. In
of been obliged to leave school
of catarrhal colds are also a com-
of condition of the ear, as reported
of affections of the ear have their
of naso-pharyngeal mucous mem-
of vast majority of all diseases
of deafness. Hence, it is highly
of congenital deafness is not congen-
of catarrh of the middle ear soon
of Report to British House of
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of existed for several generations
of skeptical that what is transmitted
of inducing deafness, which disease,
of its course, and a normal con-
of
of families which have become historical
of found in them, and it is interest-
of results.

Descend.	Relationship.	Marriages.	Children.	Deaf-born.	Became deaf from disease.	Deaf mutes.	Deaf daughters.	
1. Hearing.	Ancestor	Hearing wife.	12	1				
2. Deaf	Son.	Hearing wife.	2	2		1	1	
3. Deaf	Grandson	Deaf wife.	2					
4. Deaf	Great grandson	Hearing wife.	1					Has one hearing son.
5. Deaf	Granddaughter	Hearing husband.	3	1	1	2		One son hears. One son was born deaf in one ear, became totally deaf at 10 years from measles.
6. Deaf	Great grandson	Deaf wife.	4	2	1	1	2	Son of No. 5 in the table; has one hearing daughter.
7. Deaf	Great grandson	Deaf wife.	5		2		2	Son of No. 5.
8. Deaf	Great-great-granddaughter.	Deaf husband.	0					Had one child, still-born. No. 8 is daughter of No. 6.
9. Deaf	Great-great-granddaughter.	Deaf husband.	4					No. 9 is daughter of No. 6. She has 4 hearing daughters.

From this table it will be seen that in the fourth generation of the agnate line there are no deaf children, the only child from this union being a hearing son, while in the fifth generation of the other branch all the children hear. It is a point worth noting that of the five hearing children of the fourth generation two lose their hearing by disease. There must be some good reason other than heredity for the loss of hearing in these two last cases.

Another family noted for its large number of deaf children is the Surber family, of Iowa (Dr. Bell's Memoir, p. 31), consisting of a deaf-mute father and twelve children. From the record of this family we learn that only one of the twelve children was born deaf: the fourth, fifth, sixth, and ninth lost their hearing, in whole or in part, after birth, at what age we are not informed. Thus of the twelve children the first three and the last three could all hear. The fact that of these five deaf children only one was born deaf, and that among the

others deafness was not total, indicates that there have been influences at work other than the force of heredity. In the Huston family (Dr Bell's Memoir, p. 31) we find that not only were the parents and grandparents related before marriage, but this cousin who intermarried and all his brothers and sisters were also hard of hearing or became deaf comparatively early in life. Of the ten children of the Huston family, three were born deaf and two became deaf from disease. If members of a family with defective hearing marry their cousins and the example be repeated in the next generation, it would be a remarkable instance of the failure of the law of inheritance if the children were not deaf, for the conditions for the transmission of the defect have been rigidly complied with. In the 11 families here noted, containing 44 children, 9 of the 21 deaf children lost their hearing by disease.

The existence of large families of deaf-mutes is a fact which has been known for many years. In 1859 the London Asylum published a selected list of 23 families, containing 160 children, of whom 105 were deaf. This was long before the time of the deaf-mute newspaper, the convention, or the extensive use of the sign-language, for these have just begun to make their appearance in Great Britain.

The children who come to the schools for the deaf are largely from the homes of the poor. We find that they need all the fostering care, all the regularity in food and exercise, all the attention to habits of cleanliness, all the education in hygiene, all the protection from the weather and from the perils constantly surrounding them by reason of their deafness in the streets of our large cities, all the help from medical science, which a well-appointed institution alone can give, and for these reasons, and others of no less weight, we of America still cling to the congregate system, believing that in building up these children physically we are using the best precaution thus far known against the transmission of deafness.

Locality.—It is very difficult to gather a sufficient number of facts in regard to the influence of climate to warrant a general conclusion. It has been observed in France that the irregular table lands which border the frontiers on the north, south, and east, and the uncultivated moors which extend to the borders of the ocean, produce the largest number of deaf-mutes. In these districts, as far back as 1850 there was known to be one deaf-mute to each eight hundred inhabitants. On the conti-

ment of Europe, the highest percentage of deaf-mutes is found in Norway and Switzerland; the higher regions of the Alps, the chains of the Pyrenees, the precipices of the Jura, the flanks of the Cevennes, and other rocky and rugged districts, contain twice the proportion of deaf-mutes found in the beautiful plains of the interior. What has been observed in Switzerland and France has also been noted in the British Isles. Scotland and the Pennine chain of mountains, in the north of England, are more afflicted with deaf-mutism than the flat portions of England and Ireland. There are lines of topographical hygiene in the United States, and a study of these lines reveals the fact that certain districts contain an unusual proportion of deaf-mutes. Martha's Vineyard has, in certain villages, one deaf-mute to every twenty-five inhabitants. If this proportion were true for the city of New York, it would give the city 60,000 deaf-mutes, but fortunately the number of the deaf is so small that the average citizen seldom comes in contact with them. In all the islands off our eastern coast there are social causes at work producing liability to disease, such as the intermarriage of relatives, the secluded habits of the people, ignorance of the nature and consequence of certain diseases, so that if a sporadic case of deafness should occur, the conditions for its transmission are already in existence. The severity of the New England climate tells most disastrously on the organs of hearing. There must be some distinct principle of causation for the excessive proportion of deaf-mutes in Nova Scotia, New Brunswick, Norway, and the canton of Berne, in Switzerland. The deafness of the people living along the cataracts of the Nile has been a tradition handed down from the days of Herodotus, but no facts have been recorded to enable us to judge of the accuracy of this report. Whether the localities above noted produce deafness by reason of excessive cold and humidity, or because of the water from multifarious ores used by the people, or whether deafness is due to some special telluric condition, or to all of these causes, separately prevailing in certain localities, is a problem yet to be solved.

Consanguinity.—For many years I have resisted the evidence, based upon what I was led to believe were questionable statistics, that blood marriages had any influence in producing the deprivation we are here considering, but a further consideration of the question compels me to believe that in the mar-

riage of relatives we have one of the most prolific causes of deafness. Statistics concerning the marriage of relatives are difficult to get, but from the sources of information at hand I gather the following facts:

Dr. Williams, of the American Asylum, at Hartford, in his report for the decade ending 1887, notes that 25 families, where the parents were related before marriage, had sent 57 children to that school.

Dr. Gillett, of Illinois, reports for his school 88 consanguineous unions among hearing parents, sending 110 deaf children to the State Institution at Jacksonville.

Principal Connor, of Georgia, reports that 69 deaf-mutes educated at the State School were the children of parents related by blood.

Principal Hutton, of Halifax, Nova Scotia, says, "Out of 120 families containing 189 deaf-mutes, of whom 131 were congenital, 45 were consanguineous marriages; *five-ninths* of the parents being *first cousins*." ("Facts and Opinions," p. 86.) The reports of the State institutions of Pennsylvania, Illinois, Georgia, and California, for 1877, gave statistics of the results of consanguineous marriages for that year, and reported 97 deaf children from 65 families. (*Annals*, xxii, 242.) The appalling results of consanguinity gathered by Dr. Bemiss, of Kentucky (*Annals*, xiii, 32), the testimony of Dr. Liebrich (*Annals*, xxvii, 193), "himself a Jew," concerning the excess of deaf-mutes resulting from intermarriage among the Jews of Berlin, and the opinion of Professor Mickel (*Annals*, xxvii, 193), that "the number of the deaf and dumb is in proportion to the facility allowed by ecclesiastical and civil authorities to marriage between relatives," furnish a mass of evidence on this question that is irresistible. There is an instructive example of this evil in Dr. Bell's "Memoir" (p. 30). The Grisson family, of Kentucky, consisted of several deaf-mutes. One of these, William, married a deaf-mute, and all the children could hear. One of his sons married his cousin, a hearing woman, and the five children of this union were all deaf born.

Of the effects of mental impressions of various sorts upon the unborn child, it is impossible to do more than to rehearse the few scattered facts found in various official documents treating of the deaf. The Irish census of 1851 recorded 127 instances in which the deafness of the child was attributed to fright experienced by the mother. At Leipsic, the deafness

of six children was attributed to a similar cause, while at Gronigen, the mothers of 16 deaf children ascribed their deafness to the harsh cries of a deaf-mute, and the melancholy and depression of spirits produced by it. Witnessing deaf-mute theatricals is said to have so affected two women of rank that their children were born deaf. Mr. Herbert Vallereux mentions several cases of deafness of this character in France.

Rev. W. W. Turner, a former principal of the American Asylum, at Hartford, finding in a small village in the southeastern part of Massachusetts four families with 11 deaf children, made some inquiries of the parents as to the probable cause of deafness, and received from Mrs. M. a graphic story of the cause of deafness among her children. (*Annals*, i, 28.) The four families related circumstances of a somewhat similar character, all insisting upon the impressions of the mother in meeting deaf-mutes as producing the deafness of their children. It is noted of these four families that on neither side was there known to be any case of transmitted deafness. Mr. Turner next goes on to note five families containing deaf-mutes where the first-born became deaf from some form of disease. That the children following the first-born, in these families, were born deaf, indicates a probable apprehension on the mother's part that her offspring might be deaf, and this fear, working in that mysterious way which no one is able to understand, is believed to be the cause of deafness, not only in these five families, but in many others where the conditions are similar.

WM. G. JENKINS, M. A.,
Instructor in the American Asylum, Hartford, Conn.

THE SCHOOL MUSEUM.

ABOUT ten years ago a few of our teachers devised a plan to make permanent and convenient the little collection of articles for object lessons which teachers are always gathering, but which are usually thrown away or lost after they have served the present need.

The plan proved so feasible, and the many additions to the original collection have been so easily made, that it has quite outgrown the first intention, and is now a valued factor in our daily work.

Our first step was to secure some four-ounce salt-mouth bottles, with glass stoppers; a number of labels, on which was

printed, ILLINOIS INSTITUTION FOR THE DEAF AND DUMB, SCHOOL MUSEUM, No. —, with a space left for the name of the article: and some cards, six by seven inches, folded so as to form four pages and slip easily into an ordinary envelope. These were furnished by the Institution.

The specimens were put into the bottles or placed upon the shelves of the Museum, where they were ready for immediate use whenever needed.

Miniature tools and household utensils, such as are found in toy stores, nails, screws, and other small articles, are hung on small screw-hooks in shallow cases, made of thin boards. By this arrangement a teacher can take out one article, or the whole case, as is most desirable. We now have ninety bottles containing specimens of fruits, nuts, seeds, the different grades of sugar, oils, crude petroleum, kerosene, various extracts, olives, etc. Upon the shelves are all the common minerals and metals, and some that are not common, though often spoken of in the text-books: hops, cotton, celluloid, rubber, articles of Chinese manufacture, books used by the blind, samples of carpet, and many other things. Pieces of the common varieties of wood were contributed by the boys working in the cabinet-shop; bird's-eye maple was brought by one of the teachers who had been visiting in Michigan: redwood by one from California; while another brought fine specimens of lava and coral secured during a vacation trip to the Sandwich Islands. In all we have over five hundred specimens.

Descriptions of most of the articles, in the form of lessons, have been written by the teachers. These have been copied upon the cards and are kept with the specimens. The article on cloves, here introduced, is given as indicating the style of lesson; the questions will suggest themselves to any teacher.

CLOVES.

Cloves are the dried flower-buds of a kind of myrtle tree which grew first in the Molucca Islands in the Indian Archipelago. The tree grows four or five times as high as a man. It is an evergreen and very beautiful. It has a smooth bark and a straight trunk which branches about half way up; the branches grow smaller toward the top, and when covered with leaves form a kind of pyramid.

The flower-buds are picked before they begin to open, and are dried in the shade. The little ball at the end of the clove is the flower folded up.

Cloves are used as a seasoning in cookery. The oil of cloves is largely used in making perfumery, and is sometimes given as a medicine. Cloves are now raised in Sumatra, Zanzibar, the West Indies, and Brazil,

but the best ones are still brought from the Moluccas, where the tree grows better than anywhere else.

In the primary classes the descriptions are not often called for, but the articles are in constant use. At first the Museum was kept in a small cupboard in the closet of one of the school-rooms, but, having outgrown those quarters, is now conveniently arranged upon graduated shelves in a glass case placed in a central room of the school building. A catalogue of the collection has been made, and each teacher furnished with a copy. Its accessibility has greatly increased the popularity of the Museum, while its value as an educational element is easily illustrated: A pupil is sent to the teacher in charge of the Museum for the bottle of olives and one of olive oil, with which to fix the information given in the geography lesson that olives are an important product of Spain, and that many of the people use olive oil instead of butter. One olive cut into small pieces, and a few drops of oil distributed among the class, establish the fact, and give them a lasting impression concerning the articles in question.

Quite frequently the accompanying description is written on the large slate, and on the following day is made the basis of a language exercise.

Should others be stimulated by this description to form a Museum, I hope they will not be deterred by the fear of expense. If it is not expedient to start with the outfit described, such bottles as can be contributed, common corks, and written labels will answer the purpose in nearly every case. All that is needful is a little enthusiasm, and a place to keep the articles when collected. In concluding, the thought comes to me that by judicious exchanges the museums in different institutions might be enlarged. If the idea is favorably received, I shall be glad to hear from those interested in obtaining articles peculiar to this State.

MISS ANNIE MORSE,
Instructor in the Illinois Institution,
Jacksonville, Ill.

THE MANUAL ALPHABET IN COMMON SCHOOLS.

[It will be remembered that at the New York Convention last summer a resolution presented by Dr. Philip G. Gillett, Principal of the Illinois Institution, requesting the President and Secretary of the Convention to confer with the managers of the American Book Company, in relation to the printing of the Manual Alphabet in some of their publications, was unanimously adopted. The following correspondence shows that the request of the Convention has been complied with in a satisfactory manner.—E. A. F.]

NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE
DEAF AND DUMB,

STATION M, NEW YORK, *January 28, 1891.*

To the Managers of the American Book Company.

GENTLEMEN: At the "Twelfth Convention of American Instructors of the Deaf and the First International Convention in America," held at the New York Institution for the Instruction of the Deaf and Dumb, Washington Heights, New York city, the following resolution was unanimously adopted:

Resolved, That the President and Secretary of this Convention be requested to confer with the officers and managers of the American Book Company upon the advisability and importance of including in some of their publications a print of the Manual Alphabet, with a short chapter upon its history and use, and to call their attention to the great convenience and helpfulness it would afford in every department of social, domestic, and business life, among hearing as well as among deaf persons.

Seventy-seven schools for the deaf in the United States and seven for the deaf in Canada are represented in this request. There were in attendance Dec. 1, 1890, at these several schools of the United States, 7,546 pupils, in those of Canada 689 pupils, under 740 instructors.

If, in your judgment, the printing of the Manual Alphabet shall seem wise and expedient, I shall be glad to furnish you with a copy of the *standard* Alphabet, and also with any further information you may desire.

Very truly yours,

E. H. CURRIER,
*Secretary of the Twelfth Convention of
American Instructors of the Deaf.*

EXECUTIVE COMMITTEE AMERICAN BOOK COMPANY,

806 AND 808 BROADWAY, NEW YORK CITY,

January 28, 1891.

Mr. E. H. CURRIER.

DEAR SIR: Your esteemed favor of even date herewith is at hand.

We are glad to receive the resolution passed by the Convention of which you are Secretary, as it is thoroughly in accord with our intentions. We shall place the Manual Alphabet in the first new primary book we issue. We shall also, in case of revision or changes, put the same in such standard books as are most used by the children throughout the United States.

We have a Manual Alphabet already engraved which we should be pleased to submit to your inspection, to learn whether it is in accord with the standard.

Very respectfully,

AMERICAN BOOK COMPANY,
By HENRY H. VAIL.

NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE
DEAF AND DUMB,

STATION M, NEW YORK, *January 29, 1891.*

HENRY H. VAIL, Esq.,

American Book Company.

DEAR SIR: Your favor of yesterday is at hand. It is especially gratifying to learn that the American Book Company are already proposing to take the step so earnestly desired by the members of our profession. The Manual Alphabet sent by you, while correct in most respects, is stiff and inartistic, and in this new departure I am quite sure that it would be far more acceptable to all interested in the welfare of the deaf if you were to follow the style of the alphabet enclosed. This was drawn and engraved from photographs, under the direction of Professor J. C. Gordon, of the National Deaf-Mute College, Washington, D. C. It is correct, artistic, and is considered the finest manual alphabet ever printed.

The large size will, I fear, require more space than you would care to give; the smaller will not require a very much larger page than the copy you send. In case, however, you should find it too extended, a reduction could easily be made from the larger to fit your standard page.

Very respectfully yours,

E. H. CURRIER.

AMERICAN BOOK COMPANY, EDITORS' ROOMS,
806 AND 808 BROADWAY, NEW YORK, *January 30, 1891.*

Mr. E. H. CURRIER.

DEAR SIR: Your favor of the 29th comes to hand with enclosure.

I am glad to receive the large engravings of the Manual Alphabet. It will be necessary to have our page re-engraved, as it will be advisable to place the whole upon one page. Your criticism is valid and renders this page useless for general purposes.

Very respectfully,

HENRY H. VAIL.

NEW YORK INSTITUTION FOR THE INSTRUCTION OF THE
DEAF AND DUMB,
STATION M, NEW YORK, *February 4, 1891.*

HENRY H. VAIL, Esq.,
American Book Company.

MY DEAR SIR: Upon my return to the city after a brief absence, I find your favor of the 30th ult. Permit me, as the representative of the members of the "Twelfth Convention of American Instructors of the Deaf and the First International Convention in America," to thank you for your courteous response to the suggestion of the Convention, and also to assure you of the very thorough appreciation of your concurrence therewith.

Very truly yours,

E. H. CURRIER.

A CORRECTION.

IN an address delivered by Mr. Gardiner Greene Hubbard at the twenty-first anniversary of the Horace Mann School, Boston, Mass., he says (see *Science* of Dec. 19, 1890, pp. 337 and 338):

In 1860 my little girl lost her hearing through a fearful illness. She was a bright, intelligent child of four years, but her language was lisping and imperfect. When convinced of her deafness, our great anxiety was to retain her language, and to know how we might carry on her education. We asked advice of one of the oldest teachers of the deaf. "You can do nothing," was the answer. "When she is ten years old, send her to the Institution, where she will be taught in the sign language."

"But she still speaks. Can we not retain her language?"

"She will lose it in three months, and become dumb as well as deaf. You cannot retain it."

Advocates of a cause sometimes forget the details of a struggle, in which they are so absorbed in their determination to carry their point that they fail to give credit where credit is due; they fail to see any good in those who stand opposed to them, and attribute to them positions which they do not hold. This seems to be the case with Mr. Hubbard. To show this let me go back a little. Mr. Hubbard attended the Eighth Convention of American Instructors of the Deaf, held at Belleville, Ont., July 15-20, 1874. In that Convention he made much the same statement as that quoted above. From pages 111 and 112 of the Report of the Proceedings I quote the following:

MR. HUBBARD, addressing the Convention, said that at the age of four years his little girl lost her hearing, and when he inquired of several gentlemen engaged in deaf-mute instruction what he should do with her, he was told to wait until she became ten or twelve years of age, when she could be taught by the beautiful language of signs.

MR. D. E. BARTLETT wished to ask Mr. Hubbard if all of his friends had advised him thus.

MR. HUBBARD said: "*Yes; all his friends, not excepting his friend Mr. Bartlett.*"

MR. D. E. BARTLETT would remind Mr. Hubbard of what he had always advised him, both in private conversation and public debate, viz., to lose no time and spare no pains in doing all they could to aid the child in retaining her power of speech and practice of speaking. He regretted, however, that his friend Mr. Hubbard had been led by his intense dislike to the language of signs to forget so persistently the kind advice of his friends.

That Mr. Bartlett was correct in his statement, and that Mr. Hubbard forgot to remember any good in those whose views did not wholly coincide with his, let the following admission of Mr. Hubbard, made when time had not yet so obscured his memory as to render the facts past recalling, bear evidence. I quote from the Report of the Joint Special Committee of the Massachusetts Legislature of 1867 on the Education of Deaf-Mutes. On page 201 of the appendix Mr. Hubbard says:

Our little girl lost her hearing when she was about five years old. She could talk a little. We consulted Mr. Gallaudet, the son of Dr. Gallaudet. We consulted with our good friend Prof. Bartlett, and with other gentlemen, and they told us the child could not keep her speech three months. Mr. Gallaudet said it was not worth while to try to keep her speech.

Prof. BARTLETT. I said, now is the time to begin. If you did not begin then, you would not keep it three months: if you began then, and made strenuous efforts, you could keep it. I certainly insisted on immediately beginning.

Mr. HUBBARD. What I should have said was, that Mr. Gallaudet* told us we could not keep the speech of that child three months. * * * *Mr. Bartlett told us to keep on* [the italics are ours], and he is the only teacher of deaf-mutes who gave us the slightest encouragement; and he told us he was afraid her articulation would be so unpleasant, even if we preserved it, that we should not want to hear her talk.

Prof. BARTLETT. I stated the difficulties strongly, because I wanted to stimulate you to make every possible effort. I want all the credit I deserve on that point.

Mr. HUBBARD. I say, you were the only person who gave us the slightest encouragement. Everybody else said that it was impossible to preserve her speech.

Mr. COLLINS STONE (Principal of the American Asylum). I hope you do not infer that I should take that ground at all. Mr. Bartlett has explained what he said. I am confident that Mr. Gallaudet would have said that if you did not constantly practice with that child, she would lose her speech. That is simply the ground I take, always. If a child has any articulation, you can continue it and improve it; but not without.

Mr. Hubbard sets the old teachers of deaf-mutes in a false light when he endeavors to make it appear that nothing was done in this country to keep up and improve the speech of semi-mutes before the establishment of the little school at Chelmsford. At "Old Hartford," from the beginning, pains were taken to keep and improve the speech of such pupils, and not a few went forth from her walls able to speak plainly and fluently. I have never seen better talkers and lip-readers than some old pupils I have met who graduated here long before the Chelmsford school ever saw the light. There were no special teachers of articulation in those early days, it is true, but each teacher was enjoined and expected to practice the semi-mutes in his class in speech.

To keep and improve the speech of *semi-mutes* was the chief aim of establishing the little school at Chelmsford. At the hearing before the Legislative Committee above referred

* President Gallaudet says that, while he has no distinct recollection of a conversation held so long ago, he cannot conceive of his having given Mr. Hubbard any advice different from Mr. Bartlett's, and the Rev. Dr. Gallaudet says that he does not recall any conversation with Mr. Hubbard in relation to his daughter. Certainly neither of these gentlemen would at that time have been considered "one of the oldest teachers of the deaf." — E. A. F.

to, Mr. Hubbard said (p. 206): "The experiment is to be tried of teaching *semi-mutes* articulation. * * * I am not wedded to the idea of teaching articulation to deaf-mutes; I doubt very much whether it can be taught to congenital deaf-mutes."

The experiment was to be tried at Chelmsford of teaching speech to *semi-mutes*! It had been tried and tried successfully at Hartford for *forty-five years*, and twenty years before Mr. Hubbard and his friends started his experiment forty pupils were under regular instruction there in speech and lip-reading at the same time. Ten years before the experiment was tried at Chelmsford a special teacher of speech and lip-reading was employed at the Hartford school—the first special teacher in that line in the United States. It was not thought best in those days by the management at Hartford to try to teach the congenitally deaf.

Both Mr. Hubbard and teachers of schools using the combined manual and oral method of instructing deaf-mutes have grown into a broader view of the possibilities of speech-teaching. Every pupil entering the school at Hartford has an opportunity to learn speech and lip-reading, and to receive daily systematic instruction in those branches. Of those now receiving such instruction 55 *per cent.* were congenitally deaf, and 20 *per cent.* more were not over two years of age when they lost hearing, making 75 *per cent.* too young ever to have had speech.

The increased time allowed to pupils in these days makes it possible to accomplish results now which were impossible with the limited time allowed pupils in earlier years. For the first eighteen years of its history, the regular time of pupils at the American Asylum was limited to four years, then for a series of years it was five years, and after that, for many years, six years. Many of the early pupils remained but three years, and a considerable number still less than that. The average length of time it has been able to retain its pupils during its whole history has been but little over five years.

What oral teacher now would consider it possible to give a class of congenital deaf-mutes a fair knowledge of written and spoken language and lip-reading, together with some knowledge of arithmetic and geography, in four or even six years? It could not be done with the mass of deaf pupils.

Toward the close of his address in Boston, Mr. Hubbard remarks (*Science*, Dec. 19, 1890, p. 336): "For the deaf our

system * * * opens to them, as to others, the treasures of written language." Does he mean to imply that the combined system meets less success in that line? Surely, if he is at all acquainted with the actual attainments in these two classes of schools, he must know that, comparing their pupils, those under like physical and mental conditions, the orally-taught pupil by no means has easier access to the treasures of written language than his fellow taught under the combined system.

JOB WILLIAMS, L. H. D.,
Principal of the American Asylum,
Hartford, Conn.

THE NATURAL METHOD.

THE natural method of teaching language to the deaf is founded upon the manner in which hearing children acquire it, and is opposed to the system of teaching by rules of grammar, by model sentences, and by memorizing lessons.

This method has been long pursued in the Pennsylvania Institution for the Deaf and Dumb, and is one of the distinctive features of its system of instruction. The late B. D. Pettingill was a great advocate of this method, and was constantly writing and publishing articles in favor of it. His views may be found in former volumes of the *Annals*.

Let us call to mind some of the steps in the process by which a hearing child acquires language. The mother and nurse begin its education when it is only a few weeks old. They pat the baby's cheeks, and make it look at them and smile, and in this way they attract its notice and attention, and awaken its dormant mind to its surroundings. This may seem like a small matter, but it is of great importance to gain and hold a child's attention, for no advancement can be made in its education until the power to concentrate its mind is acquired. In like manner the first efforts of the teacher of the deaf should be directed to gain the attention and interest of his pupils.

While the mother gives her attention-lessons, she talks lovingly to the baby and arouses its sense of hearing by the sweet music of her voice. It is not long before the little one comes to recognize the voice and face of its kind friend, and makes known the fact to the delighted parent. From unconscious it has now advanced in its education to conscious existence,

of three important senses—feeling,

or stops at this point, constantly, how-
 day's lessons, and showing off its intelli-
 natives. But as soon as the child is old
 things, the mother begins to teach the
 such as doll, dog, cat, rattle, milk, etc. It is
 these objects, and the names are repeated
 on, till it comes to associate the names with
 selves. The time when a child begins to
 with words is a very interesting period in its
 to the discovery that there is a connection be-
 sounds and things, and its attention is hence-
 to their perception. But what was done to
 discovery about? Was the child directed to it by
 Hardly. All the parent could do was to put the
 way, and leave it to find out the connection for
 ability of a child to make this discovery is the re-
 intelligence, and distinguishes it from idiots, who
 able of the performance.

anner in which a child gains its conception of the re-
 words to things should be significant to thoughtful
 We should not attempt to force knowledge into the
 of our pupils. We cannot "learn" them, as many
 usly say when using *learn* for *teach*; they must do that
 selves. The best of teachers can only explain difficulties
 for pupils and direct their minds into the paths of knowl-
 After they have prepared suitable lessons and placed
 before them, they should leave them to grasp and assimi-
 the ideas in their minds by their own processes of thought.
 knowledge gotten without much help is better retained in the
 memory and is more interesting to the learners. Teachers may
 make lazy pupils and prevent them from becoming self-reliant
 by doing too much for them. In referring to his college course,
 President Woolsey, of Yale, used to say that he regretted he
 had once asked and received assistance in one of his studies.
 He felt that he could and should have mastered the difficulty
 himself.

Before a child begins to walk it often acquires the meaning
 of the verbs "come," "drink," "want," etc., and will show by
 its actions when addressed with the words, "Baby come,"
 "Baby drink," and "Baby want doll," that it understands

them. It is only taught the names of actions of which it can have experimental knowledge. It would understand no others. But when it begins to walk, it requires words for the ideas that denote the dangers to which it is exposed in its enlarged sphere of action, and the parents begin to teach it such words as, "burn," "hurt," "fall," "cut," "scratch," etc. If the child attempts to examine the hot stove, the mother says in tones to awaken its fears, "Baby burn," or if its little hand gets lacerated on the point of a pin, she says pitifully, "Pin scratch baby," or if it gets a tumble, she says, "Poor baby fall." This baby language is very elliptical, and could hardly be construed according to the rules of grammar. Yet it is English, and contains the germs of sentences out of which the child eventually evolves fully rounded ones. While the child's mind is weak and developing, rudimentary sentences are more intelligible and better comprehended by it than if they were fully expressed. May not a deaf child's letter in broken English be better understood by a deaf friend of the same mental attainments than if corrected by a teacher before mailing? There can be no doubt that we correct the language of the deaf too much and teach them too choice English. Our fastidious treatment of their puerile efforts discourages them.

But we must return from our digression. Up to this time the child has made no efforts to speak. It has only listened, and learned to distinguish the meaning and correct sounds of different words which must be acquired previous to the utterance of them.

When a child is about ten months old, it begins to imitate articulate sounds and attempts to utter words it has heard spoken. It now knows itself as "Baby," and generally uses nouns in expressing its wants; as, "Baby apple," for "The baby wants an apple;" and if it has been hurt it says, "Baby hurt." Nobody thinks of correcting its language, and nobody laughs at its mistakes; but everybody seeks to encourage its efforts, for all language must be learned in this way. The first attempts are poor and made up of blunders, but progress is secured by continued efforts. No parent ever says to his child "You must not call yourself Baby, or say 'Baby hurt,' but say 'I am hurt.'" And then suppose the parent should begin to teach the immature mind of the child grammar: that "I" was a personal pronoun, of the singular number, first person, denoting the speaker, nominative case, and subject of the verb

"am hurt," and that "am hurt" was a verb in the passive voice, representing the subject as acted upon, and first person singular, agreeing with its nominative "I." What would be said of such a parent? He would be considered a fit subject for a lunatic asylum. And yet this is just what we do when we teach the undeveloped minds of our pupils grammar in order to teach them language.

No : the parent leaves the child's language alone. He knows that it is a creature of imitation, and that in time it will correct its mistakes by hearing how others speak, just as the ear learns to correct false notes in music by the discords. We all know how bad English grates on the ears of cultivated people. Musicians learn music by listening to good players and singers, and by playing and singing themselves. If a player strikes a false note, he plays over the part again and again till all the notes are correctly sounded and harmony is produced. Who ever heard of a music teacher that began his lessons by teaching his pupils the rules and theory of music? A music pupil does not begin to reason upon his art until he knows something of the art itself. In like manner we learn good language by listening to good speakers and reading good authors, and by carefully imitating them. To speak concisely, we learn the correct usage of our language. That is all. Custom, not grammar, regulates and prescribes the right use of language.

We do not wish to be understood to say that a teacher need not be familiar with the genius and structure of his language. He undoubtedly should, but he does not acquire these from a study of its grammar. The mastery of a language can only be acquired by thinking in it and by making use of it in speaking and writing, not by analyzing it.

The masterpiece of Greek literature, Homer's Iliad, was composed before Cadmus introduced the use of letters into Greece. The author or authors knew nothing of the exquisite language that they spoke except what they perceived to be the prevailing usage. The beautiful Vedas of the Sanscrit tongue were only put into writing in modern times. The composers of Homer and the Vedas had only the ear to guide them, no written models of any kind, and no grammars to refer to for rules of diction. If they had been compelled to think of the correct forms of speech in which to express their thoughts these wonderful compositions would never have been produced, for the attention would have been drawn away from the thoughts to

be expressed to the language in which to express them. For this reason writers are seldom able to compose well in any language except that of their native country. Modern languages are much simpler in form and grammatical construction than those of ancient times. Greek and Sanscrit are very elaborate and highly inflected, and composition in them from our point of view would be no easy matter. Yet all that the authors of Homer and the Vedas knew of them was the correct usage, or how they were spoken.

This fact should convince us that a knowledge of grammar is not essential to composition, and of no particular aid to the deaf in learning language. Its study is unintelligible to the young mind and beyond its comprehension. A child cannot understand the rules applicable to the language spoken around him until he has an extensive knowledge of it. How can he apply rules to what he has not learned and knows little or nothing about? It is ridiculous to think he can, and a scholar should not take up the grammar of his language until he is well advanced in his studies. Mr. Marcel says: "It may without hesitation be affirmed that grammar is not the stepping-stone, but the finishing instrument."

When the Greeks began to discuss the beauties of their language and restrict its composition to rules, their language and its literature began to decline. It is the use of a language that is needed, not its philosophy. We can speak and write a language no better because we can tell the inflections of its different parts of speech.

There is nothing more interesting or, to the intelligent mind, more wonderful than language. It brings us into communion with our fellows. An intelligent use of it is conducive to our happiness, but a wrong use of its words and a misapprehension of their meaning often produce bitterness, strife, and enmity. How careful, then, we should be in teaching and using it.

But what do we need to teach this wonderful instrument of the human mind? The answer is: Simply a knowledge of correct usage, which is only to be learned from our best writers and speakers, and the ability to impart it to others as we have received it.

If our pupils ever learn English, they must learn it in about the same way that we learned it. We heard it spoken; but as they cannot hear, we must show them how we use it, and make them use it in the same way. This we should do by talking

and conversing with them in writing on topics and subjects in which we and our pupils are interested. We should not call their attention to the language they are using, but to the thoughts they express in it. We did not, when children, think about the language we were learning, but about the thoughts we were expressing. We were interested in our play and in what we saw going on around us, and in our desire to express our thoughts and satisfy our curiosity we acquired the language. All children are anxious to learn and are fond of amusements. By making use of this propensity we can train and develop their minds. There is no reason why their curiosity should not be directed to the acquisition of useful knowledge, and their love of play to the performance of something useful. The kindergarten, which is founded upon the natural system, undertakes to accomplish these ends. The children think the school play, and so it is, because it diverts and amuses them. But the games they play teach them something that will be of use to them in after-life.

We should seek to find out the tastes of our pupils, furnish them with the means of gratifying them, and assist them as far as we can to develop them. Teachers oftentimes do their pupils more harm than good, because their methods repress originality and discourage genius. A child should be given the chance to be what God and his nature intended he should be. We may thwart his bent and turn him into another direction, but our triumph will not bring us much, if any, satisfaction. It is of great importance to the deaf that their talents should be developed and not repressed while at school. The sense of hearing affords its possessors opportunities to advance in knowledge and develop their talents after leaving school by social intercourse with better-instructed persons, but the deaf, owing to the loss of hearing, usually make little advancement when no longer at school, and often retrograde, owing to untoward surroundings.

Some teachers of the deaf think that their pupils can learn language by committing to memory and reciting portions of it *verbatim*. The method, however, is unnatural and contrary to the processes by which hearing children learn speech. If this were all that were required, the deaf would soon learn language. They soon become able to memorize lessons with ease, and oftentimes those who understand least of the sense will write them with most precision. They may have a vague conception

of what the passages mean, but are quite unable to take the language apart and rearrange it in the expression of thoughts of their own. From these facts we should learn that the language of lessons should not be memorized; only the ideas and facts they contain should be fixed in the mind and recited in the words of the pupil. These should be frequently recalled and rehearsed, and if errors in the thoughts and expression of them occur they should be corrected. If the language of each recitation differs from the previous one, so much the better. It is the proof that the pupil is gaining in power to express his thoughts. He may not do this in choice language; but what of that, so long as we can understand what he wants to say? His thoughts are the treasures of his mind; not the words with which he tells them.

We make too great use of signs in our schools for our pupils to make rapid advancement in language. English cannot be learned where they are in constant use, except imperfectly. It should not be studied by referring to signs for an explanation of the meaning of its terms. Explanations should be made in words with which the pupil is already acquainted. We always explain to hearing children what they want to know in English. Why should not the deaf be treated in the same way, at least those who have some acquaintance with our language? The only reason that I can assign for not pursuing the same plan with the deaf is, that by so doing we should have to put forth greater efforts. But the advantages of this course to the deaf would be invaluable. Where signs are used the pupils persist in thinking in them, whereas they should be taught from the first to think in English. They should not be allowed to express an idea in signs that they can express in words. We can never say that our pupils have learned our language till they come to think in it, and not in signs. Those who teach the deaf orally are right in prohibiting signs among their pupils. A person who wishes to learn French must lay aside his own vernacular for a time, and think and speak in French, till it becomes as familiar to him as his own tongue. He must not be simply able to express or think in English the French he reads or hears spoken. So long as he has to do that, he cannot be said to have acquired the language. But this is all that the deaf taught by the aid of signs are able to do. They think in signs and translate English into signs, which, by the abuse of them, have become their vernacular.

Teaching the deaf to write isolated or model sentences is

another erroneous way of teaching them language. This consists in selecting words and phrases which the pupils have not learned, and dressing up some thought in them to illustrate their use. Teachers who follow this plan suppose their pupils will be able by this means to make use of them when they have an occasion for them. But how unnatural! The mind is not a warehouse in which a great lot of unpacked goods is kept. Everything it has must stand the test of use. Nothing is kept in it that has not been used and found serviceable. Words only become a part of our mental furniture by actual use, and those which we do not use, and only know by ear or sight, make a very slight impression on the mind, and soon slip out of the memory when no longer heard or seen. A student of the classics, who has not opened a Greek or Latin book for a long time, often finds it difficult to translate a short passage from one of those works, because the words of the languages in which they are written never formed a part of his vocabulary.

Words and sentences, removed from their connection in a conversation or discourse, lose their force, become inanimate, and do not strike us with the meaning they possessed when they stood in the passages from which they were taken. For this reason it is difficult to write appropriate sentences upon words and phrases, as most sentences require the assistance of other sentences to make the sense and thought complete. Who, at writing, has not noticed this dependence of one sentence upon another; how they are locked together by modifying words and phrases; how a change in a word or expression will require a change in precedent and subsequent sentences; how meaningless a single sentence will appear by itself, and what stupid and erroneous opinions garbled passages will make the writer seem to hold!

The deaf should be made conscious of these facts and taught how to express continuity of thought. They can only acquire the process by the actual use of connected language, but not by writing compositions of their own at first. The teacher should dictate compositions till they learn the manner of connecting the expression of thought. Then they are ready for original work. This method is to be particularly recommended, as, during dictation, the teacher has control of the line of thought, and can teach his pupils to put down things relevant to the subject in their proper places and connections, and in this way assist to develop their reasoning powers.

The Natural Method.

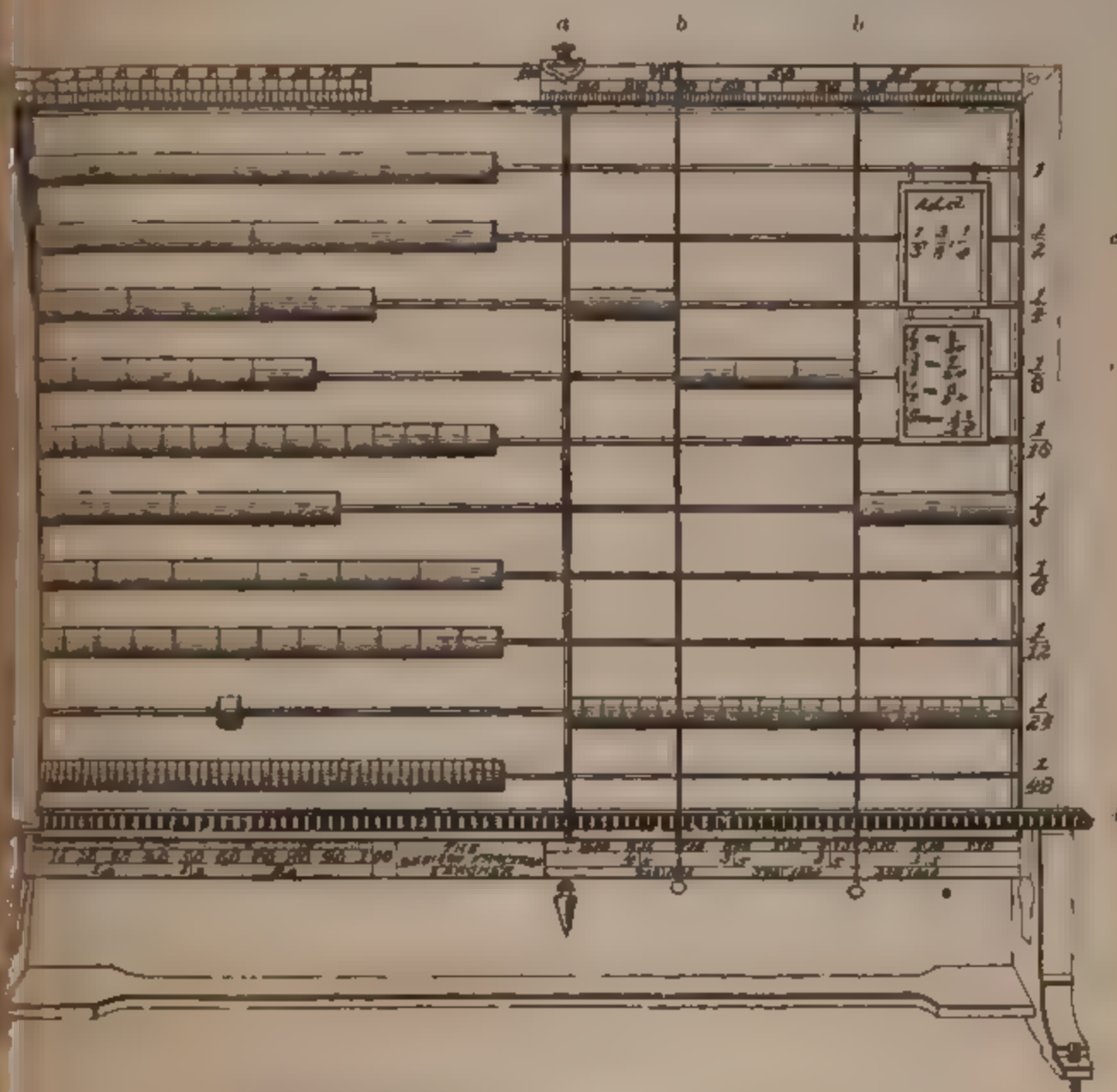
It is a waste of time that writing model sentences is of very little use in learning the composition of a language, and that the work is little better than wasted. Such work is a waste of time. If one should wish to learn to compose in a language, it would be far better to translate long sentences from some English author, and not short sentences. It has long been the custom. To prove the futility of the present method we have only to refer the readers of this book to the principles of Arnold's Latin Prose Composition. The purpose of the work is to teach the composition of Latin by translating a great number of English sentences into that language according to the models of the author. Many students have spent weary hours over the lessons, but to what purpose? If one that learned to think and compose in English were to study? The only good a student could obtain from them would be a stock of Latin words and acquaintance with the idioms of the language.

A student who had learned Latin composition from the present method wishing to write a letter in that language would be at a loss to go about it? He would find the task impossible. As he had not learned to think in Latin, he would have to write a letter in English, and then turn it into Latin by recalling his models, and this is just what students taught by Arnold's system do.

Students are taught to memorize lessons, and produce model sentences containing words or phrases the teacher has explained. They learn more English than Arnold's students learn Latin composition by substantially the same method. We learn to speak and write English because, from infancy, we are taught and associated with hearing persons, and were therefore able to imitate their speech and learn to read their writing. Above all, because our associates made use of no other language, and we had no other in which to express our thoughts. The deaf, also, can be made to master English when we present the language to them through English alone, as our parents and friends presented it to us. We may find the process slow and wearisome, but we shall not then, as now, be able to say that very few of the deaf are ever able to obtain a command of our language.

J. D. KIRKHUFF, M. A.,
Instructor in the Pennsylvania Institution,
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A NEW ARITHMETICAL DEVICE.



- a Plumb-line and finger-piece.
 b b Substitute lines to mark preceding position of plumb-line.
 c c Paper-patch slates with supporting hooks.
 d d, Incomplete meter rule showing centimeters.

THE above is a representation of the "Denison Fraction-Teacher," which I have invented and perfected.* As its name implies, it is a device to illustrate and explain—in short, to *teach*—fractions, both common and decimal, from simple definitions to the more difficult operations.

It consists of a rectangular frame 36 inches long by 27 inches high, on adjustable supports. The front of the frame

* Patent applied for December 2, 1880.

is of white wood, in order to bring out distinctly the numerals and scales marked on it. It is spanned by lateral wires, on which are movable cylindrical blocks of hard-wood "ebonized," whose single or united length on each wire is 16 inches. The uppermost cylinder is of one piece and represents the unit or whole number. The other cylinders show the same unit respectively divided into 2, 4, 8, 16, 3, 6, 12, 24, 48 equal parts, each fractional unit being marked on the corresponding portion of the frame on the right.

On the right of the upper horizontal bar of the frame a length of 16 inches, to conform to that of the unit block below, is divided into 100 equal spaces, representing hundredths, while on the same portion of the lower bar the equivalent length is given in fifths, tenths, and thousandths.

Through the slots which run the whole length of the two horizontal bars, a slender chain with a plumb-weight is attached to the movable plate and finger piece which slides on the upper bar. Besides this chain or plumb-line there may be employed, as shown in the cut, additional lines or chains, with hooks for attaching them to the upper bar or to the wires. Their office is to mark the place previously occupied by the plumb line in case of its change of position to demonstrate some other point.

The purpose of this plumb-line is to ascertain and mark the correspondence and equality of the various fractions represented by the cylinder blocks on the wires and the scales on the bars of the frame. Thus, when the indicating pointer of the sliding plate rests on the figure 50 of the upper bar, the blocks being closely massed on the wires to the right, this pointer and the plumb-line in concert will indicate the equality or identity in magnitude of the following quantities:

$$\frac{50}{100}, \frac{1}{2}, \frac{2}{4}, \frac{4}{8}, \frac{8}{16}, \frac{18}{3}, \frac{3}{6}, \frac{6}{12}, \frac{12}{24}, \frac{24}{48}, \frac{5}{10}, \frac{25}{5}, \frac{500}{1000}.$$

In a similar way it will show the same relation to one another of 66 $\frac{2}{3}$ hundredths and the fractions $\frac{2}{3}, \frac{4}{6}, \frac{8}{12}, \frac{18}{24}, \frac{3}{4}$, etc.

In the cut, in order to illustrate how to add $\frac{1}{3}, \frac{2}{3}$, and $\frac{1}{4}$, the block representing $\frac{1}{3}$ is detached from the two others and moved to the right. The plumb having shown $\frac{1}{3} = \frac{8}{24}$, is moved away and one of the marking lines substituted to still keep in mind the fact just ascertained. Then three $\frac{1}{4}$ blocks, representing $\frac{3}{4}$, are aligned close to the $\frac{1}{3}$ block, and, the

plumb-line having indicated $\frac{3}{8} = \frac{9}{24}$, another marking line is substituted. Then $\frac{1}{4}$ is shown to be equal to $\frac{6}{24}$, and their sum is indicated as $\frac{9}{24}$. This whole demonstration may, however, be performed without resorting to the substitute lines, if the teacher chooses.

Simpler yet is the illustration of subtracting one fraction from another. In seeking the difference between $\frac{1}{4}$ and $\frac{1}{8}$, the plumb-line shows $\frac{1}{4} = \frac{2}{8}$, and that $\frac{1}{8}$ placed on its wire in a similar position to that of $\frac{1}{4}$ corresponds to $\frac{1}{8}$, thus marking the difference as $\frac{1}{8}$.

As multiplication is a short method of addition, and division of subtraction, ways of illustrating their processes will readily occur to a teacher of arithmetic without further suggestion, and so need not be repeated here.

Since the integer or whole number is shown by the unit block or the sum of the fraction blocks on each wire, a mixed number is easily exemplified by the required number of entire groups of fractional blocks on the wires reinforced by an individual piece or pieces representing the desired fraction; thus, for $5\frac{2}{3}$, use the five upper wires for units and two $\frac{1}{3}$ blocks.

By lessening by $\frac{1}{8}$ the length of the aggregated blocks on the $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{24}$, $\frac{1}{32}$ wires, and disregarding all other blocks and scales, one has the unit divided into 7, 14, 21, 42 parts, illustrating fractions with 7 and multiples of 7 for denominators.

By applying the same course to the 6ths, reducing them $\frac{1}{6}$, one has fractions with denominators 5, 10, 20, 40; and using 11 of the 12ths, and a proportionate number on the two wires below, there will be represented fractions having 11, 22, 44 as their denominators.

The small slates of *papier-maché*, with books attached, will be found of use to exhibit fractions having numerals different from those marked on the frame, or to indicate operations, as shown in the engraving.

Proceeding from fractions of abstract to those of concrete numbers, by taking, where it is practicable, three-fourths of the blocks on the wires, and massing them on the left instead of on the right, as before, the pointer of the sliding-plate resting on the figure 12 of the upper bar (representing the foot-measure in inches), the plumb-line will show blocks aggregating one foot, linear measure, divided into 3ds, 6ths, 12ths, 9ths, 18ths, 36ths, and on the lower bar the same length appears in 4ths and 100ths.

The illustrations of definitions and operations already described or suggested can thus be repeated here with fractions of a different order and magnitude.

In the engraving, the larger section of a meter rule, marked for centimeters in alternate dark and white, is shown resting on temporary supports just above the lower bar of the frame. This allows the use of the meter in conjunction with the plumb-line in order to teach the relation of its measures to the linear foot or yard. In the rapidly-growing use of the metric system in this country, this feature of the Fraction-Teacher will, it is hoped, be a recommendation.

A *resumé* of some of the advantages of using the Fraction-Teacher includes :

1. The saving in time. The time required to draw chalk-lines or circles, or to cut up fruit, paper, or any other substance suitable for the purpose, and to correctly divide and subdivide so as to show the required fractions, is considerable. Repetition is frequently called for, and this takes still more time, as the work, as a general thing, has to be done over again.

2. Its durability in material and solidity of construction, and consequent readiness for use on the shortest notice. Neither time, patience, nor strength need be frittered away in searching for something to be made an object-lesson in fractions.

3. The strength and clearness of the impression it makes upon the mind. It is something the pupil can *see*, and *handle*, and *measure* in all its proportions. Children often fail to perceive the relation and analogy between mere pencil or chalk lines and actual quantities. Even well-educated persons, considered proficient in arithmetic, have said that a short experience with the Fraction-Teacher has given them more thorough and satisfactory ideas of the nature of fractions and the principles that underlie their operations than they ever had before.

4. Its simplicity and reliability. The plumb-line appeals to the pupil as only a thing coming within his own personal experience and observation can appeal. He does not take the result reached on trust ; he sees it, he *knows* it. This goes farther and produces a deeper and more enduring effect than the mere dictum of an instructor. The more the young pupil studies facts from the standpoint of independent and self-

reliant investigation, the firmer will be his step and the wider his outlook in the fields of knowledge.

5. It is comprehensive. It illustrates *all* definitions, principles, and operations used in fractions—embracing addition, subtraction, multiplication, and division. It includes in its work both common and decimal fractions, and fractions of both abstract and concrete numbers. It can be used in percentage. It admits of the use of the meter and other measures to show their proportionate relation to our linear foot measure. With the aid of the scales on the frame and on the meter, it may be made to serve as an object-lesson in mechanical drawing. The use of the plumb-line has, also, an educative effect in various ways outside of “fractions.”

6. It is in a line with the present educational movement in favor of object-teaching, as exemplified in the popularity of kindergarten processes, and their increasing employment in the modern system of instruction. These methods are greatly appreciated and used by the more progressive Old World teachers, especially in Germany. Our work in primary schools not seldom falls short of theirs in thoroughness and real success. They seem to make more use of devices and illustrative apparatus, and to give more patient study to the difficulties that beset a pupil's mind in mastering an idea than we do. There are too many teachers among us who are not able to conceive how a scholar can not understand at a glance a thing so simple to themselves, as $\frac{3}{4}$, and who work themselves into an unchristian state of mind over the dullness of the pupil.

From a very interesting book for teachers, Dr. Klemm's “European Schools, or What I Saw in the Schools of Germany, France, Austria, and Switzerland,” I make the following extract. The author is describing a visit to a school-room in Holland :

The master, after offering me a seat, proceeded with his work as if no stranger was present. I liked that, and soon my liking for the young man grew into admiration, as I observed with what loving-kindness he treated the youngsters, and in what a masterly way he handled a class and taught his subjects. The pupils were young, and the class before him at the black-board may have averaged eight years. They were wrestling with *fractions* ; yes, dear reader, with fractions. Not such as $\frac{3\frac{1}{4}\frac{2}{3}}{6}$, but familiar ones, such as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$. The teacher used an interesting contrivance to illustrate parts of a whole. [Here follows a description of the contrivance : a chest of shallow shelves, fitted with boards, cut into fractional parts, each labelled $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, &c.] The teacher had removed the 3ds, 6ths, and others,

BUREAU OF EDUCATION, WASHINGTON

Mr. JAMES DENISON,

Principal of the Kendall School, Washi

DEAR SIR :

Having carefully examined your device for teaching the deaf, and compared it to a comparison with devices of similar kind used in Europe, I arrive at the conclusion that your device has many advantages and facilities such as are not found elsewhere, and will be useful in the hands of any teacher, and will be welcomed with delight by all who have the welfare of the deaf at heart. The verbal inventive genius of the citizen of the United States has more proved its superiority over that of our European neighbors.

Wishing you all the success you so richly deserve,
Respectfully yours,

Specialist.

CONVENTION OR ASSOCIATION

THE First Convention of American I and Dumb was held at the New York Institution, New York, in August, 1850. Six schools were represented by twenty two delegates. The honorary number in attendance to thirty-five.

The Twelfth Convention was held at the New York Institution. Fifty by two hundred and forty delegates, honorary members, a total of three hundred. Many former pupils of the New York Institution more or less directly connected with the cause, interested spectators and swelled the number to about six hundred.

The contrast in point of numbers is striking. If we make a comparison of the number of schools for the deaf in 1850 and in 1890, we shall be

The number of deaf children in the schools in 1850 was 8,901. In the United States in 1890 it was 9,652. If to this be added the number of children in private instruction we shall have represented a constituency of

Between 1850 and 1858 the number of deaf children in the schools was 8,901. Between 1858 and 1860 it was 9,652. Between 1860 and 1862 it was 10,403. Between 1862 and 1864 it was 11,154. Between 1864 and 1866 it was 11,905. Between 1866 and 1868 it was 12,656. Between 1868 and 1870 it was 13,407. Between 1870 and 1872 it was 14,158. Between 1872 and 1874 it was 14,909. Between 1874 and 1876 it was 15,660. Between 1876 and 1878 it was 16,411. Between 1878 and 1880 it was 17,162. Between 1880 and 1882 it was 17,913. Between 1882 and 1884 it was 18,664. Between 1884 and 1886 it was 19,415. Between 1886 and 1888 it was 20,166. Between 1888 and 1890 it was 20,917. Between 1890 and 1892 it was 21,668. Between 1892 and 1894 it was 22,419. Between 1894 and 1896 it was 23,170. Between 1896 and 1898 it was 23,921. Between 1898 and 1900 it was 24,672. Between 1900 and 1902 it was 25,423. Between 1902 and 1904 it was 26,174. Between 1904 and 1906 it was 26,925. Between 1906 and 1908 it was 27,676. Between 1908 and 1910 it was 28,427. Between 1910 and 1912 it was 29,178. Between 1912 and 1914 it was 29,929. Between 1914 and 1916 it was 30,680. Between 1916 and 1918 it was 31,431. Between 1918 and 1920 it was 32,182. Between 1920 and 1922 it was 32,933. Between 1922 and 1924 it was 33,684. Between 1924 and 1926 it was 34,435. Between 1926 and 1928 it was 35,186. Between 1928 and 1930 it was 35,937. Between 1930 and 1932 it was 36,688. Between 1932 and 1934 it was 37,439. Between 1934 and 1936 it was 38,190. Between 1936 and 1938 it was 38,941. Between 1938 and 1940 it was 39,692. Between 1940 and 1942 it was 40,443. Between 1942 and 1944 it was 41,194. Between 1944 and 1946 it was 41,945. Between 1946 and 1948 it was 42,696. Between 1948 and 1950 it was 43,447. Between 1950 and 1952 it was 44,198. Between 1952 and 1954 it was 44,949. Between 1954 and 1956 it was 45,700. Between 1956 and 1958 it was 46,451. Between 1958 and 1960 it was 47,202. Between 1960 and 1962 it was 47,953. Between 1962 and 1964 it was 48,704. Between 1964 and 1966 it was 49,455. Between 1966 and 1968 it was 50,206. Between 1968 and 1970 it was 50,957. Between 1970 and 1972 it was 51,708. Between 1972 and 1974 it was 52,459. Between 1974 and 1976 it was 53,210. Between 1976 and 1978 it was 53,961. Between 1978 and 1980 it was 54,712. Between 1980 and 1982 it was 55,463. Between 1982 and 1984 it was 56,214. Between 1984 and 1986 it was 56,965. Between 1986 and 1988 it was 57,716. Between 1988 and 1990 it was 58,467. Between 1990 and 1992 it was 59,218. Between 1992 and 1994 it was 59,969. Between 1994 and 1996 it was 60,720. Between 1996 and 1998 it was 61,471. Between 1998 and 2000 it was 62,222. Between 2000 and 2002 it was 62,973. Between 2002 and 2004 it was 63,724. Between 2004 and 2006 it was 64,475. Between 2006 and 2008 it was 65,226. Between 2008 and 2010 it was 65,977. Between 2010 and 2012 it was 66,728. Between 2012 and 2014 it was 67,479. Between 2014 and 2016 it was 68,230. Between 2016 and 2018 it was 68,981. Between 2018 and 2020 it was 69,732. Between 2020 and 2022 it was 70,483. Between 2022 and 2024 it was 71,234. Between 2024 and 2026 it was 71,985. Between 2026 and 2028 it was 72,736. Between 2028 and 2030 it was 73,487. Between 2030 and 2032 it was 74,238. Between 2032 and 2034 it was 74,989. Between 2034 and 2036 it was 75,740. Between 2036 and 2038 it was 76,491. Between 2038 and 2040 it was 77,242. Between 2040 and 2042 it was 77,993. Between 2042 and 2044 it was 78,744. Between 2044 and 2046 it was 79,495. Between 2046 and 2048 it was 80,246. Between 2048 and 2050 it was 80,997. Between 2050 and 2052 it was 81,748. Between 2052 and 2054 it was 82,499. Between 2054 and 2056 it was 83,250. Between 2056 and 2058 it was 84,001. Between 2058 and 2060 it was 84,752. Between 2060 and 2062 it was 85,503. Between 2062 and 2064 it was 86,254. Between 2064 and 2066 it was 87,005. Between 2066 and 2068 it was 87,756. Between 2068 and 2070 it was 88,507. Between 2070 and 2072 it was 89,258. Between 2072 and 2074 it was 90,009. Between 2074 and 2076 it was 90,760. Between 2076 and 2078 it was 91,511. Between 2078 and 2080 it was 92,262. Between 2080 and 2082 it was 93,013. Between 2082 and 2084 it was 93,764. Between 2084 and 2086 it was 94,515. Between 2086 and 2088 it was 95,266. Between 2088 and 2090 it was 96,017. Between 2090 and 2092 it was 96,768. Between 2092 and 2094 it was 97,519. Between 2094 and 2096 it was 98,270. Between 2096 and 2098 it was 99,021. Between 2098 and 2100 it was 99,772. Between 2100 and 2102 it was 100,523. Between 2102 and 2104 it was 101,274. Between 2104 and 2106 it was 102,025. Between 2106 and 2108 it was 102,776. Between 2108 and 2110 it was 103,527. Between 2110 and 2112 it was 104,278. Between 2112 and 2114 it was 105,029. Between 2114 and 2116 it was 105,780. Between 2116 and 2118 it was 106,531. Between 2118 and 2120 it was 107,282. Between 2120 and 2122 it was 108,033. Between 2122 and 2124 it was 108,784. Between 2124 and 2126 it was 109,535. Between 2126 and 2128 it was 110,286. Between 2128 and 2130 it was 111,037. Between 2130 and 2132 it was 111,788. Between 2132 and 2134 it was 112,539. Between 2134 and 2136 it was 113,290. Between 2136 and 2138 it was 114,041. Between 2138 and 2140 it was 114,792. Between 2140 and 2142 it was 115,543. Between 2142 and 2144 it was 116,294. Between 2144 and 2146 it was 117,045. Between 2146 and 2148 it was 117,796. Between 2148 and 2150 it was 118,547. Between 2150 and 2152 it was 119,298. Between 2152 and 2154 it was 120,049. Between 2154 and 2156 it was 120,800. Between 2156 and 2158 it was 121,551. Between 2158 and 2160 it was 122,302. Between 2160 and 2162 it was 123,053. Between 2162 and 2164 it was 123,804. Between 2164 and 2166 it was 124,555. Between 2166 and 2168 it was 125,306. Between 2168 and 2170 it was 126,057. Between 2170 and 2172 it was 126,808. Between 2172 and 2174 it was 127,559. Between 2174 and 2176 it was 128,310. Between 2176 and 2178 it was 129,061. Between 2178 and 2180 it was 129,812. Between 2180 and 2182 it was 130,563. Between 2182 and 2184 it was 131,314. Between 2184 and 2186 it was 132,065. Between 2186 and 2188 it was 132,816. Between 2188 and 2190 it was 133,567. Between 2190 and 2192 it was 134,318. Between 2192 and 2194 it was 135,069. Between 2194 and 2196 it was 135,820. Between 2196 and 2198 it was 136,571. Between 2198 and 2200 it was 137,322. Between 2200 and 2202 it was 138,073. Between 2202 and 2204 it was 138,824. Between 2204 and 2206 it was 139,575. Between 2206 and 2208 it was 140,326. Between 2208 and 2210 it was 141,077. Between 2210 and 2212 it was 141,828. Between 2212 and 2214 it was 142,579. Between 2214 and 2216 it was 143,330. Between 2216 and 2218 it was 144,081. Between 2218 and 2220 it was 144,832. Between 2220 and 2222 it was 145,583. Between 2222 and 2224 it was 146,334. Between 2224 and 2226 it was 147,085. Between 2226 and 2228 it was 147,836. Between 2228 and 2230 it was 148,587. Between 2230 and 2232 it was 149,338. Between 2232 and 2234 it was 150,089. Between 2234 and 2236 it was 150,840. Between 2236 and 2238 it was 151,591. Between 2238 and 2240 it was 152,342. Between 2240 and 2242 it was 153,093. Between 2242 and 2244 it was 153,844. Between 2244 and 2246 it was 154,595. Between 2246 and 2248 it was 155,346. Between 2248 and 2250 it was 156,097. Between 2250 and 2252 it was 156,848. Between 2252 and 2254 it was 157,599. Between 2254 and 2256 it was 158,350. Between 2256 and 2258 it was 159,101. Between 2258 and 2260 it was 159,852. Between 2260 and 2262 it was 160,603. Between 2262 and 2264 it was 161,354. Between 2264 and 2266 it was 162,105. Between 2266 and 2268 it was 162,856. Between 2268 and 2270 it was 163,607. Between 2270 and 2272 it was 164,358. Between 2272 and 2274 it was 165,109. Between 2274 and 2276 it was 165,860. Between 2276 and 2278 it was 166,611. Between 2278 and 2280 it was 167,362. Between 2280 and 2282 it was 168,113. Between 2282 and 2284 it was 168,864. Between 2284 and 2286 it was 169,615. Between 2286 and 2288 it was 170,366. Between 2288 and 2290 it was 171,117. Between 2290 and 2292 it was 171,868. Between 2292 and 2294 it was 172,619. Between 2294 and 2296 it was 173,370. Between 2296 and 2298 it was 174,121. Between 2298 and 2300 it was 174,872. Between 2300 and 2302 it was 175,623. Between 2302 and 2304 it was 176,374. Between 2304 and 2306 it was 177,125. Between 2306 and 2308 it was 177,876. Between 2308 and 2310 it was 178,627. Between 2310 and 2312 it was 179,378. Between 2312 and 2314 it was 180,129. Between 2314 and 2316 it was 180,880. Between 2316 and 2318 it was 181,631. Between 2318 and 2320 it was 182,382. Between 2320 and 2322 it was 183,133. Between 2322 and 2324 it was 183,884. Between 2324 and 2326 it was 184,635. Between 2326 and 2328 it was 185,386. Between 2328 and 2330 it was 186,137. Between 2330 and 2332 it was 186,888. Between 2332 and 2334 it was 187,639. Between 2334 and 2336 it was 188,390. Between 2336 and 2338 it was 189,141. Between 2338 and 2340 it was 189,892. Between 2340 and 2342 it was 190,643. Between 2342 and 2344 it was 191,394. Between 2344 and 2346 it was 192,145. Between 2346 and 2348 it was 192,896. Between 2348 and 2350 it was 193,647. Between 2350 and 2352 it was 194,398. Between 2352 and 2354 it was 195,149. Between 2354 and 2356 it was 195,900. Between 2356 and 2358 it was 196,651. Between 2358 and 2360 it was 197,402. Between 2360 and 2362 it was 198,153. Between 2362 and 2364 it was 198,904. Between 2364 and 2366 it was 199,655. Between 2366 and 2368 it was 200,406. Between 2368 and 2370 it was 201,157. Between 2370 and 2372 it was 201,908. Between 2372 and 2374 it was 202,659. Between 2374 and 2376 it was 203,410. Between 2376 and 2378 it was 204,161. Between 2378 and 2380 it was 204,912. Between 2380 and 2382 it was 205,663. Between 2382 and 2384 it was 206,414. Between 2384 and 2386 it was 207,165. Between 2386 and 2388 it was 207,916. Between 2388 and 2390 it was 208,667. Between 2390 and 2392 it was 209,418. Between 2392 and 2394 it was 210,169. Between 2394 and 2396 it was 210,920. Between 2396 and 2398 it was 211,671. Between 2398 and 2400 it was 212,422. Between 2400 and 2402 it was 213,173. Between 2402 and 2404 it was 213,924. Between 2404 and 2406 it was 214,675. Between 2406 and 2408 it was 215,426. Between 2408 and 2410 it was 216,177. Between 2410 and 2412 it was 216,928. Between 2412 and 2414 it was 217,679. Between 2414 and 2416 it was 218,430. Between 2416 and 2418 it was 219,181. Between 2418 and 2420 it was 219,932. Between 2420 and 2422 it was 220,683. Between 2422 and 2424 it was 221,434. Between 2424 and 2426 it was 222,185. Between 2426 and 2428 it was 222,936. Between 2428 and 2430 it was 223,687. Between 2430 and 2432 it was 224,438. Between 2432 and 2434 it was 225,189. Between 2434 and 2436 it was 225,940. Between 2436 and 2438 it was 226,691. Between 2438 and 2440 it was 227,442. Between 2440 and 2442 it was 228,193. Between 2442 and 2444 it was 228,944. Between 2444 and 2446 it was 229,695. Between 2446 and 2448 it was 230,446. Between 2448 and 2450 it was 231,197. Between 2450 and 2452 it was 231,948. Between 2452 and 2454 it was 232,699. Between 2454 and 2456 it was 233,450. Between 2456 and 2458 it was 234,201. Between 2458 and 2460 it was 234,952. Between 2460 and 2462 it was 235,703. Between 2462 and 2464 it was 236,454. Between 2464 and 2466 it was 237,205. Between 2466 and 2468 it was 237,956. Between 2468 and 2470 it was 238,707. Between 2470 and 2472 it was 239,458. Between 2472 and 2474 it was 240,209. Between 2474 and 2476 it was 240,960. Between 2476 and 2478 it was 241,711. Between 2478 and 2480 it was 242,462. Between 2480 and 2482 it was 243,213. Between 2482 and 2484 it was 243,964. Between 2484 and 2486 it was 244,715. Between 2486 and 2488 it was 245,466. Between 2488 and 2490 it was 246,217. Between 2490 and 2492 it was 246,968. Between 2492 and 2494 it was 247,719. Between 2494 and 2496 it was 248,470. Between 2496 and 2498 it was 249,221. Between 2498 and 2500 it was 250,000.

Letter from the Faculty of the National Deaf-Mute College :

KENDALL GREEN,
WASHINGTON, D. C., *February 2, 1891.*

DEAR MR. DENISON :

Having carefully examined your ingenious Fraction-Teacher, it gives us pleasure to bear testimony to its merits.

It illustrates clearly and forcibly all the definitions, principles, and operations used in fractions from their simplest elements to their most complex relations, including both common and decimal fractions, proves the facts to be taught clearly and unmistakably, and fixes them indelibly in the mind. Its introduction into our schools will shorten and simplify the work of teaching fractions from the beginning to the end of the course.

Yours sincerely,

E. M. GALLAUDET,
E. A. FAY,
SAMUEL PORTER,
J. C. GORDON,
J. W. CHICKERING,
JNO. B. HOTCHKISS,
AMOS G. DRAPER.

Letter from the Commissioner of Education :

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
WASHINGTON, D. C., *January 24, 1891.*

MR. JAMES DENISON,

Principal of the Kendall School, Kendall Green, Washington, D. C.

DEAR SIR :

The apparatus invented by you for the illustration of the arithmetical processes of teaching fractions seems to me to have the following merits: The plumb-line and spirit-level attached to it make it a sort of object-lesson in principles that underlie many of the arts, especially the building arts. Aside from the direct use of the machine in teaching the relations of fractions one to another, therefore, your invention has this important recommendation, giving it an advantage over other devices of the kind.

I note, too, that your apparatus is of a more universal character than the others. By the use of your plumb-line you can show the relation of decimals to all other fractions. You can also compare any fraction having a denominator less than forty-eight (48) directly with any other fraction having a less denominator than it.

But in my opinion, the most valuable feature of your invention is its adaptation to exhibit the relation of the French metric system to the weights and measures in common use. If you get up this apparatus at a price sufficiently low to bring it within the means at the disposal of school committees, I shall think you are doing a good service for education.

Very respectfully,

W. T. HARRIS,
Commissioner.

Letter from L. R. Klemm, Ph. D., formerly Principal of the Cincinnati Normal School, and Superintendent of Public Schools in Hamilton, Ohio; author of "European Schools, or What I Saw in the Schools of Germany, France, Austria, and Switzerland," "Chips from a Teacher's Workshop," and numerous school-books; now, Specialist in the Bureau of Education :

BUREAU OF EDUCATION, WASHINGTON, D. C., *Feb. 7, 1891.*

Mr. JAMES DENISON,

Principal of the Kendall School, Washington, D. C.

DEAR SIR :

Having carefully examined your device for teaching fractions, and subjected it to a comparison with devices of similar purport exhibited and used in Europe, I arrive at the conclusion that this contrivance offers advantages and facilities such as are not found in any other device. It will be useful in the hands of any teacher, and will therefore be hailed with delight by all who have the welfare of children at heart. The proverbial inventive genius of the citizen of the United States has once more proved its superiority over that of our Old World competitor.

Wishing you all the success you so richly deserve, I am, dear sir, respectfully yours,

L. R. KLEMM.

Specialist, Bureau of Education.

CONVENTION OR ASSOCIATION ?

THE First Convention of American Instructors of the Deaf and Dumb was held at the New York Institution, in the city of New York, in August, 1850. Six schools were represented by twenty-two delegates. The honorary members raised the total number in attendance to thirty-five.

The Twelfth Convention was held in August, 1890, and also at the New York Institution. Fifty schools were represented by two hundred and forty delegates and one hundred and six honorary members, a total of three hundred and forty-six. Many former pupils of the New York Institution, and others more or less directly connected with the workers, were interested spectators and swelled the number in attendance to about six hundred.

The contrast in point of numbers between these two conventions is striking. If we make a comparison also between the number of schools for the deaf, their pupils and teachers, in 1850 and in 1890, we shall be still more impressed.

The number of deaf children in the United States under instruction in the schools in 1850 was 1,100. In 1890 it was 8,901. In the United States and Canada combined it was 9,652. If to this be added the number of deaf children under private instruction we shall see that the Twelfth Convention represented a constituency of about 10,000 pupils.

Between 1850 and 1858 five conventions were held at intervals ranging from one to three years. From 1858 to 1868, cov-

ering the war period, there were none. In 1868 a Conference of Principals was held in Washington which has gone upon record as the Sixth Convention. Six conventions have followed at the regular interval of four years.

The management of the First Convention was a much simpler matter than that of the last. The questions before that body were fewer and of less complex character. The active members were only twoscore, while in the last Convention they were twelve times as many.

There is an inspiration in numbers. One of the most interesting and impressive features of the last gathering was the presence of such a large number of teachers, animated by a common interest, assembled from all parts of the land. Those who had grown gray in the service and others of fewer years but large experience, as well as those who had but lately put the harness on, alike found in personal contact and counsel new stimulus and fresh incitement to continued work. But this pleasant feature had its embarrassing side. To use the language of a prominent member, the body had become so large as to be "unwieldy." How to satisfy the various interests represented, to give each member full opportunity to present his views in writing, to allow ample time for free discussion, and to see that no important topic was omitted on the programme, was a very difficult problem to solve, and it may be permitted to the writer, who was a member of the Business Committee, to add, it was not done to the satisfaction of either the Committee or the membership of the Convention. The criticism passed, that there was too much reading of papers and consequently too little time for free discussion, was a just one. Whether the Committee would have been justified in selecting certain papers and passing over others may well be doubted. The plan pursued of presenting all, and so abridging the time for discussion as practically to shut it off on almost all the papers, seemed on the whole the fairest course.

Forty papers were laid before the Business Committee, some complete and some by title. If all had been presented on the first day it would have aided materially in the arrangement of a programme; but, as in all previous Conventions, some were offered on the second and some on the third day. If the rule adopted by a previous Convention, and embodied in the call for the Twelfth in the form of a request that a "one page

among teachers can be maintained during such a question whether the Conventions might not be held with and the whole dependence be placed upon the printed matter; but this is not the question of the deaf, more than any others, occupy an important place and need the help which comes from frequent meetings with others similarly employed. They go from the Convention with new inspirations and new zeal, and the benefit to their respective schools. More frequent meetings intensify this zeal and add to the benefits. The question at one of our Conventions, that if the period between two more than three or four years there would not be enough interest to occupy the attention of the members, is the best. The experience of the last Convention and the publications of the *Annals*, *Educator*, and other papers show that the topics of interest are many and various. Whether a yearly or biennial sessions has been made is a question enough to decide whether that is too often.

The convention proper, or the public meeting, can best be managed by standing committees. They hold their places and act during the interval between the Conventions. These committees will make careful arrangements for all details some months in advance of the meeting. A committee on Programme, for example, will so arrange that an equitable amount of time be given to each item for discussion, and solicit, if need be, papers and speakers.

A general assembly, where advocates can meet on common ground, must, of course, be held. It will, however, be found advisable to form special committees for specific purposes.

How far this should be carried is a problem to be worked out. An Oral Section has already been formed. It must be, or the difficulties of the last Convention were increased by increasing numbers, will face the same.

An organization on this general plan has been found the most effective, and, combining the advantages of a plan for a permanent association, will occupy a vantage-ground which it has not yet reached.

CHAS. A.

Principal of the Maryland School for the Deaf

The Committee has been able, discreet, and faithful, and much is due them for the success which has attended the various conventions. Under the difficulties imposed by lack of organization they could not well have done more. As Executive Committee of the *Annals*, they have preserved in that publication a large amount of valuable matter relating to the deaf. In the performance of this duty they have done inestimable service to the cause. As a factor in the development of the instruction of the deaf, the influence of the *Annals* can not be overestimated.

Holding fast to all that is good in the past in methods and means, let us now take the step which is needed to put our work abreast of the times and reap all the advantages which thorough organization and advanced methods will afford.

The two main points to be urged and insisted upon are a permanent organization and more frequent meetings. The body should be incorporated, having a charter clearly setting forth its purpose, that whatever advantages are to be secured by the power to hold property may be enjoyed. There will be, of course, a constitution and by-laws defining membership and reaching all details necessary to a complete and effective organization. The proper officers will be the custodians of all original papers and records, and should at once take steps to make this collection as complete as possible. They should open the way to receive gifts of money as well as of other material aids.

The object of the association should be the advancement of the interests of the deaf without special reference to any particular method of instruction. It should embrace the intellectual, moral, physical, and manual training, census enumeration, status of pupils after leaving school, and whatever else is of importance relating to the interests of the class.

More frequent meetings are needed. Teachers in the public schools hold institutes yearly or oftener. The National Educational Association meets every year. The Association of Instructors for the Blind holds biennial meetings. Once in four years, the rule so long in practice with teachers of the deaf, is a period too long to allow between such gatherings. The fact that a Conference of Principals is held midway between these conventions does not affect the question, as teachers are not members of that body.

If the proper degree of sympathy, interest, and enthusiasm

characters representing things beyond the reservation or thought" (p. 3). On the contrary that the subjects should be those that are of children of their age—for example, stories "Giant-Killer," "The Three Bears," etc.—and to be acted out *after the reading of the story has*

While, of course, the language employed would at first, be beyond the comprehension of the subjects would not; and the subsequent action and interest to what otherwise might be unmeaning words imperfectly or incorrectly understood.

If the natural method is followed, our pupils required to gather ideas from written language, the reverse process is insisted upon to any great extent difficult it may be to gather thoughts from words and phrases, it is certainly easier than to explain in a language that we do not know. We can write a book with much greater ease than we can speak a tongue. Reading is easier than writing, and should come first.

I do not undervalue the importance of writing, too—on the part of the deaf child it should be secondary to reading in the natural order is followed.

ALEXANDER

WASHINGTON, D. C., March 17, 1891.

NOTICES OF PUBLICATIONS

BONET, JUAN PABLO. Simplification of the Method and Method of Teaching Deaf-Mutes from the original Spanish by H. N. S. with a Historical Introduction by A. Farnham. 212.

Bonet's "*Reduction de las Letras para hablar los Mudos*," printed in 1620 is the first treatise on the instruction of the deaf and it is also one of the best. In his views Bonet was in advance not only of his successors, Amiel, L'Épée, and Sicard, but also of the progress in the general science of education.

READING BEFORE WRITING.

To the Editor of the Annals.

SIR: I have read, with much interest Mr. Blattner's article upon "The Natural Method," published in the *Annals*, vol. xxxvi, pp. 1-11. I am somewhat surprised, however, that he should accept my premises and yet reject my conclusions.

On page 3 he says: "Dr. Bell is eminently correct in his premise that the natural order is to understand language before using it." Surely then it follows that reading should precede writing. Mr. Blattner, however, claims (p. 3) that this would be a reversal of the natural order, "for to read and to memorize is to *use* language." I am certain that a little reflection will convince your readers that this is an error. Reading is "understanding the language," and writing is "using" it. If this is so, it follows that Mr. Blattner's method is not the "natural" method at all, but the reversal of it.

So far from "losing sight of the very important fact that children come to understand expressions by hearing them repeatedly applied" (p. 3), I urge that deaf children will come to understand them by *seeing* them constantly applied. If, then, the natural method is followed, it is the *teacher*—far more than the pupil—who "should be made to write from the very beginning" (p. 10). If the teacher communicates by means of writing (or spelling) the pupil will then have a chance of picking up the language in the natural way, which is always by *imitation*.

Writing, however, is a very slow process. The best of us can hardly scribble more than about thirty words in a minute. We cannot even spell with anything like the rapidity with which words are spoken to the ears of hearing children.

I think, therefore, that the teacher should supplement his personal efforts by the language of printed books, and reading should be made a regular school exercise in every class. Printed words can be read at an enormously greater rate than they could be written or spelled by the hand. I have no doubt that pupils could read more words in an hour than the teacher could write or spell in a day. Hence much valuable time would be saved and a much greater repetition of words and phrases be obtained than if books were not employed.

I would not have deaf children "worry over pages of printed

If "signing" be allowed to grow up instead [of language] as a medium of intercourse, we shall invariably find that the habits of thought and expression are induced which will form the basis for the acquirement of correct written and spoken language, and will be of great service, not only to the work of education generally, but to the work of education generally. Signs are the natural language of the deaf; when that stage should cease, as much in the case of the deaf pupil as in the case of the hearing.

Dr. Elliott explains in a foot-note that he is here speaking exclusively from the educational point of view: "The 'signing' in the intercourse of the adult deaf and in public worship, if they come together in a class in the community, is altogether a different matter."

Full directions are given the teacher in connection with each lesson. The importance of constant review and practice both in and out of the school-room is insisted upon as essential to the success of the method.

The Lessons begin with names of objects and the form of sentences: "What is that? This is a desk," etc. Next come simple orders: "Stand up," "Sit down," etc. Then objective personal pronouns: "Come to me. Go to him," etc.

The definite and indefinite articles are introduced with their nouns, "the" being used if there is only one of the kind in the room, "a" if there is more than one: "a window, to the wall, the door, a chair," etc.

The meaning of adjectives is explained by comparison: "A horse is large. A mouse is small;" and (3) by showing qualities conveyed by the adjectives: "The iron is hard. The wool is soft. The flesh is tender." The pupil will doubtless at one time or another use adjectives.

The first form of the verb is the copula "is"; then come "have" and "has": "I have a book. She has a book." Then together with the interrogative "can": "Can you walk? Can you write?" Then "like": "I like cake. I do not like meat." The verb is used as the complement of the subject: "She likes to eat an apple."

sitting. You are reading a book," etc.; usual action: "A fish swims in the water," etc.; the progressive form of the past: "He was sitting just now. What was she doing at nine o'clock?" etc.; the simple form of the past tense: "Yesterday was Sunday. I went to church," etc.

Dr. Elliott does not say how long a period of time the course laid down in the book is expected to cover, but he says it "is intended to lead the pupils in the direction of ability to understand, and be understood, in ordinary communications, to a point similar to that reached by intelligent 'hearing' children when their direct education commences." Near the end of the *Lessons* we find such language as this, taken from a lesson describing a picture, and previously taught by question and answer:

The time of the year shown by that picture is, I think, the summer, because the leaves of the trees are green and the trees are (fully) covered with them. It is a fine day, and the sun is (appears to be) shining brightly. I think it is a very pretty picture.

HEIDSIEK, J. Ein Notschrei der Taubstummen. [The Deaf-Mute's Cry of Distress.] Breslau: Max Woywood. 1891. 8vo, pp. 60.

Mr. Heidsiek, of the Breslau Institution, is already known to the careful readers of the *Annals* (see vol. xxxii, pp. 104-113; vol. xxxv, pp. 271-275) as a German teacher of the deaf who thoroughly disbelieves in the German method, and who has the courage of his convictions. When we read the quotation with which he begins the present work, "It often requires more courage to change one's opinions than to remain true to them," we thought that, perhaps, he had been led to modify his views and was now going to make a recantation; but no: it is his colleagues whom he wishes to have change their opinions: of his own he abates not a jot nor a tittle, but persists in them more vehemently than ever.

The arguments that Mr. Heidsiek brings forward against the method of instruction prevailing in his country are similar to those we used to hear in the days when the battle of methods was raging so bitterly in America—days that we hope are passed, not to return. He maintains that the German method is contrary to nature, and therefore contrary to reason: that with a majority of the pupils the ability to speak and read the lips acquired through the painful efforts of both teachers and taught is of no practical value whatever, being wholly lost a few

years after leaving school; that the precious school period which might be utilized in developing the mind, imparting useful information, and preparing the pupils for the practical duties of life, is wasted in fruitless articulation exercises; that in schools where the attempt is made to prevent the pupils from using the sign-language, the rod, deprivation of food, and tying the hands, are the means by which the result is attained; that not only in the suppression of the sign-language, but in general, the tendency of the German method, since it affords no medium of free communication between teachers and pupils, is to prevent sympathy between them, making teachers harsh and cruel, and pupils morose and ugly, so that in fact some of the schools are penal institutions in the worst sense of the term; that the "ideal" concerning which so much is said by German instructors, viz., the enabling of the deaf to communicate freely with hearing persons by speech and speech-reading, should more properly be called an "idol," since it is false and unattainable; that every year hundreds of pupils from sixteen to eighteen years of age leave the German schools unable to write a letter, understand the simplest juvenile book, or gather the news of the day from the newspaper, and with less knowledge of their duties as citizens and Christians than is possessed by ordinary children of eight or nine years of age; that the favorable impression made upon visitors and inspectors is too often produced by exhibiting semi-deaf and semi-mute pupils as deaf-mutes; that the deaf themselves generally hate the method, and after leaving school use the sign-language not only in communicating with one another but with hearing people; etc., etc.

In Mr. Heidsiek's opinion, it is only by a judicious combination of articulation and the sign-language that the best results can be reached, and the education of the deaf be given practical value, thoroughness, and dignity.

Mr. Heidsiek's publications have made a great stir in the schools of Germany. His views have received favorable comment from some educational journals, but, so far as we can judge from the periodicals devoted to deaf-mute education, they meet with little sympathy from his professional brethren. In this book, however, he says that some of his colleagues have encouraged him to persist in the conflict in which he has engaged. But whether his countrymen applaud or censure, he has the approval of his own conscience, for he believes that in pleading for a change in the methods by which the deaf of

Germany are taught he is obeying the Scripture injunction, "Open thy mouth for the dumb, in the cause of all such as are appointed to destruction."

MYGIND, DR. HOLGER. *La Sordità Congenita. Contributo all' Eziologia e Patogenesi del Sordomutismo.* Traduzione dal tedesco, preceduta da una prefazione, per G. Ferreri, Vice-Direttore e Maestro del R. Istituto Pendola in Siena. [Congenital Deafness. A contribution to the Ætiology and Pathogenesis of Deaf-Mutism. Translated from the German, preceded by a preface, by G. Ferreri, Director and Instructor of the Royal Pendola Institution at Siena.] Siena: I. Gatti. 1891. 8vo, pp. 117.

Dr. Mygind, as assistant during many years to Dr. G. Meyer, of Copenhagen, in his clinics for diseases of the ear, had the opportunity to make careful investigation of some of the cases treated. In this treatise he presents various statistics concerning fifty-four persons deaf from birth or early infancy, such as the number of deaf relatives, the consanguinity of parents, predisposing influences on the part of parents, unfavorable hygienic or social circumstances, and "telluric" conditions. The only fact that detracts from the value of his results is the small number of cases considered. He also treats at some length of the anatomical condition of the organs of hearing in the deaf, comparing the facts observed by himself with those reported by Hartmann and other European investigators, and reaching conclusions generally similar to theirs.

Mr. Ferreri's interesting preface shows the importance and value of such investigations as those here described, and the relation they bear to the work of instruction.

We have also received the following publications, some of which may be noticed more at length in a future number of *the Annals*:

BELL, ALEXANDER GRAHAM, Ph. D. *Marriage: An Address to the Deaf.* Washington, D. C.: Volta Bureau. 1891. 8vo, pp. 14.

CAMP, MISS FRANCES G. *Drills in Arithmetic.* Compiled from Grube. Institution Press, Edgewoodville, Pa. 1890. Small 4to, pp. 43.

MATTIOLI, COSTANTINO, D. S. P. *Guida per l' Insegnamento della Parola Articolata ai Sordomuti.* [Guide for the Teaching of Articulate Speech to Deaf-Mutes.] Siena: S. Bernardino. 1889. 12mo, pp. 126.

MICHELONI, F. Sull' Educazione dei Sordomuti. [Or
tion of Deaf-Mutes.] Rome : Eredi Botta. 1890.

REPORTS OF SCHOOLS, 1890 : Arkansas, Califor
Colorado, Groningen, Horace Mann, Minnesota, Neb
Dakota, Pennsylvania, Rotterdam, South Australian
kota. 1891 : Bristol, Lyons, Missouri, Northern
Oregon, Pennsylvania Oral, Rhode Island.

REPORT of Proceedings of the Second Convention of
sota Association of the Deaf, held at the School fo
Faribault, Minnesota, June 25, 26, 27, 1890. Scho
Steam Print. 1890. 8vo, pp. 40.

SCHOOL ITEMS.

Calcutta School.—A Government school for th
been established in Calcutta, largely through the
Sahib Garindranath Bhowe, a wealthy and benevole
of that city. Mr. Francis Maginn, formerly a stud
National College at Washington, now missionary to
deaf of Ireland, a man of great energy and high cha
been appointed first teacher of the school, and ha
the position.

Chinchuba School.—Sister M. M. John, Prioress of
for the Deaf under Catholic auspices at Chinchuba,
La., did not respond to our letter of inquiry in tin
mention its establishment in the last number of the
in the absence of authentic information we did not
School in the Tabular Statement of American S
the 7th of January she wrote :

I must apologize for my delaying to acknowledge you
our little beginnings at Chinchuba. Our Institution op
ber, 1890, and we have not therefore much to boast of.
some time we hope to improve. Our teachers are no novi
some among them having spent ten and even twenty y
deaf-mutes. The three systems are familiar to them ; w
ally be decided on for the school will depend on circum.

Trades, too, we hope to introduce later on, but just n
too young and too backward to apply themselves to
advantage.

Glasgow Institution.—Mr. W. H. Addison, la
of the West of England Institution, has been a
Master of the Glasgow Institution.

Halifax Institution.—Mr. J. Scott Hutton, for the past thirty-three years (except during an interval of four years) Principal of this school, died Feb. 26, 1891, of a disease of the liver. Mr. Hutton was born in Perth, Scotland, in 1833. At an early age he became a teacher in the Edinburgh Institution, at the same time pursuing his studies in the University. When the Halifax Institution was established in 1857 he was appointed Principal. The early history of the Institution was one of difficulties, discouragements, and struggles, but Mr. Hutton persevered in his work and raised the school to a high state of efficiency. In 1878 he accepted the position of Vice-Principal of the Ulster Institution, and during the four years that he held it contributed much to the prosperity of that Institution. In 1882 he returned to his work in Halifax, where he labored faithfully until his death.

Mr. Hutton was a man of considerable intellectual attainments, a clear thinker, a forcible speaker, and an able writer. He made valuable contributions to the literature of the profession by several text-books, by articles in the *Annals*, and by papers and remarks in the Conventions of Instructors and Conferences of Principals. In 1869 he received the honorary degree of Master of Arts from the National Deaf-Mute College, in whose work he always took a warm interest. If the Faculty had consented he would have established competitive prizes in mathematics for the students of the College.

Mr. Hutton was active not only in the education of the deaf, but in the promotion of education generally, in the church, and in everything pertaining to the welfare of the community. In many ways his death leaves a vacancy that cannot easily be supplied.

Indiana Institution.—In addition to the *Silent Hoosier*, the Institution publishes a semi-monthly periodical for use in its own school-rooms, called the *School-Room Aid*. It contains stories, editorial comments, news items, humorous paragraphs, puzzles, and idioms illustrated by their use in sentences. Foot-notes and a glossary aid the pupils in comprehending the language. The aim is to amuse and instruct, teaching language through reading.

Milwaukee Day-School.—The publication of a small monthly paper, called the *Deaf Speaker*, was begun in January. Its

object is to teach the pupils type-setting and printing, serve as a medium of exchange between the school and its patrons, and help to advance the oral method.

National College.—Congress at its last session made an appropriation of three thousand dollars to provide for instruction in articulation in the College next year, thus supplying a need long felt.

Six "Normal Fellowships," of the value of five hundred dollars each per annum, have been established from funds not derived from the Treasury of the United States. Graduates of colleges will be appointed to these Fellowships for one year. They will be required to reside in the Institution, and will receive instruction in both the manual and oral methods of teaching the deaf. They will be expected to perform certain duties in the Institution, and will therefore constitute an addition to its teaching force.

President Gallaudet says in a circular of information concerning this "new departure," that the suggestion of establishing the Fellowships is taken from the arrangement existing in the Johns Hopkins University at Baltimore, from the ranks of whose Fellows college professors, principals of high schools, and other instructors of high rank are drawn in large numbers. He quotes the following letter from President Gilman :

JOHNS HOPKINS UNIVERSITY,

BALTIMORE, MD., *March 5, 1891.*

DEAR SIR : I am very much interested in what you have told me of your plans and hopes for the development of the National Deaf-Mute College. Particularly it seems to me wise that you should give prominence to the fact that articulation is taught, by designating a competent instructor who should have a specific title indicating that he performs this service. I am even more interested in what you say of the possibility of enlisting annually half a dozen or more men in the service of the College, who would not only be valuable assistants during their residence with you, but would be trained for permanent careers in the various institutions of the land. Such a system here has been most fruitful in good results, and I can easily foresee how a carefully chosen staff of Associates or Fellows in the National Deaf-Mute College—holding an intermediate position between the permanent members of the Faculty on the one hand and the students on the other—would inspire the teachers, help the scholars, and furnish, in time, a corps of instructors for the schools for the deaf which now exist in such considerable numbers throughout the country.

Yours sincerely,

D. C. GILMAN.

Dr. E. M. GALLAUDET,

President National Deaf-Mute College.

President Gallaudet states some of the advantages to the profession of deaf-mute instruction, growing out of the Normal Fellowships, as follows :

First of all, opportunities will be furnished to schools for the deaf to secure the services of young men and women, possessed of all their faculties, of the highest education and character, with a knowledge of the natural language of the deaf, and capable of teaching by either the manual or the oral method as circumstances may require.

These young teachers will have had not only good academic and collegiate training, but also, besides all they will gain at Kendall Green, at least a year's residence in Washington, where valuable opportunities are found for culture in the public libraries, museums, legislative halls, courts, and many other places where contact with men of high attainments is possible.

If the heads of schools will co-operate with the College authorities, both in aiding them to select thoroughly competent persons as Fellows, and in opening to the Fellows on the completion of their course suitable positions as teachers, we are confident the result will be to maintain the character of the profession at the high standard aimed at from the very inception of the work in this country, and ably set forth by Dr. H. P. Peet in the Fourteenth and Fifteenth Annual Reports (1832 and 1833) of the New York Institution. We all know what high qualifications the elder Gallaudet and Peet sought in their associates, and what remarkable results in language, notwithstanding a limited term of instruction and other obstacles, they produced with the congenitally deaf. If we maintain this standard of professional ability, we may hope to reproduce those results in addition to the other advantages now offered our pupils, to retain the confidence of the public, to secure a liberal support for our schools and a suitable compensation for teachers, and to keep the work free from the debasing influence of party politics. We appeal to all heads of schools and all friends of the deaf to give the College authorities their hearty support in this new field of labor.

New Jersey School.—The Board of Trustees has been abolished by the Legislature. The School is placed in the hands of the State Board of Education, consisting of six of the State officers, and eight other members to be appointed by the Governor from both political parties. This Board will also have control of the State Normal and Model Schools.

North Carolina School.—The General Assembly has passed an act separating schools for the deaf and the blind. The new School, "The North Carolina School for the Deaf and Dumb," will be located at Morganton, in the foothills of the Alleghany Mountains, about sixty miles east of Asheville, on the Western North Carolina Railroad. The immediate location is one of the most healthful in the State, with a great abundance of water from mountain streams. The town of Morganton gave a site of one hundred acres of valuable land to the State for the School. It is hoped the new buildings of the School will be ready for occupancy in 1893, and that the new arrangement will provide better facilities than the former for the instruction of the deaf.

North Dakota School.—A compulsory law has been passed, requiring attendance between the ages of seven and twenty, under penalty of a fine ranging from five to fifty dollars.

Pennsylvania Oral School.—The new building of this school is now crowded, and application has been made to the Legislature to provide funds for additional buildings.

Miss Emma Garrett has resigned the position of Principal, to take effect June 20, in order to devote her time to establishing a Home for the training in speech of deaf children before they are of school age. A printed circular will be issued, giving her letter to the Board of Directors, and their kind reply, which will more fully explain the situation. Miss Garrett will continue her Normal Training School for Teachers of the Deaf, established in 1881.

St. Louis Day-School.—Miss Helen C. Vail, of Indianapolis, Ind., has been appointed teacher of articulation.

Tung Chou School.—The *Rochester Daily Paper for Our Little People*, of February 7, 1891, gives a consecutive story of the progress of this School from its inception, prepared from Mrs. Mills's letters. Nearly a thousand dollars have been contributed to the support of the School, chiefly from schools for the deaf in America through Mr. Z. F. Westervelt, Superintendent of the Western New York Institution. The School now numbers six pupils, and it is hoped the excellent results it

is showing will lead to the establishment of other schools in the Flowery Kingdom. Mrs. Mills desires to make normal work a feature of the School, in order that teachers may be prepared to carry on the work in other places. It is hoped that friends in England will join us in America in establishing the School on a good foundation. Contributions may be sent either through Mr. Westervelt, or directly to the Rev. Charles R. Mills, Tung Chow, Chefoo, China.

Victorian Institution.—Mr. and Mrs. Rose and Miss Rose have resigned the positions of superintendent, matron, and assistant teacher, respectively, but Mr. Rose has accepted that of non-resident superintendent. Mr. W. Jones, who for more than seventeen years has been the assistant secretary, has been elected resident superintendent, and Mrs. Jones matron.

Warsaw Institution.—Mr. Denison, Principal of the Kendall School, calls our attention to the following item in the November, 1890, number of *Free Russia*, the organ of the English "Society of Friends of Russian Freedom":

We learn of a shocking case of cruelty and stupidity in the work of Russifying Poland. The curator of the Warsaw District educational institutions, Mr. Apukhtin, ordered that all instruction should be given in the Russian language, even in the Warsaw School for Deaf-Mutes, to which institution children afflicted in this manner are sent from all parts of Russian Poland. The result is a somewhat unexpected one—unexpected, that is, by the administrator. On returning, after several years of education, to their homes, where only Polish is spoken, the pupils understood no one and were understood by no one. They had been taught to speak, read, and write, yet among their own relations they were forced to remain as absolute deaf-mutes as they had been before entering the school.

West Virginia Institution.—Mr. John A. Boland, B. A., a graduate of the Pennsylvania Institution and of the National College, has been added to the corps of instruction.

Western Pennsylvania Institution.—Six times during the year, viz., on Christmas, New Year's, Washington's Birthday, Decoration Day, Closing Day, and Thanksgiving Day, a paper called the *Holiday Gazette* is published. It contains stories and other articles appropriate to the occasions when it appears,

and is designed for the entertainment and instruction of the pupils.

Wisconsin School.—Miss E. G. Bright, a faithful and successful teacher for nearly seven years, has resigned her position. Miss Ruth Swiler will complete the year's work with the class.

E. A. F.

MISCELLANEOUS.

Day-Schools vs. Institutions.—In the *Manchester Guardian* of November 1, 1890, Mr. Edward Townsend, Head-Master of the Birmingham Institution, published a letter in which he quoted the following authorities in favor of institutions rather than day-schools :

So recently as early in the present month the Chairman of the London School Board, in delivering his annual address, adverted to their work among deaf children in the schools, and expressed himself in the following clear and emphatic terms respecting it : “ I am not satisfied that under the conditions of our day classes, with their intermittent attendance and the shortness of the time at our disposal, we are making the advance in this matter ” (*i. e.*, in oral teaching) “ we should desire to see. But until the Board can establish permanent institutions for this work I do not think much more progress will be made. * * * A more permanent work in connection with the latter ” (*i. e.*, the deaf) “ would not much affect the general finances of the Board, and I think that its results would be of a more lasting and useful nature than the imperfect results our expenditure upon them now achieves.”

The testimony of the superintendent of those day-school classes for deaf children, the Rev. Dr. Stainer, is even of a strong and condemnatory character, as the following extract from a paper read by him before the Charity Organization Society in London will show. He said : “ If school instruction were all that is required for deaf children, class-rooms, teachers, and school appliances would fully supply the want, and there would be no necessity to question the relative value of day-schools, or the completeness of the provision made by the School Board for London. But I do not think that any one thoroughly acquainted with the idiosyncrasy of the deaf children of the poor (and it must be borne in mind that this is the class we are dealing with, not the well-to-do, who are capable of paying for the education of their children) would venture to assert that they could be sufficiently educated by attending a school five hours a day, five days a week, like ordinary children, and this perhaps for a few years only, and that nothing further need be done for them. If it were so, then all the institutions on the Continent and in America, as well as our own, are spending large sums unnecessarily ; but if, on the contrary,

those noble institutions are essential to the well-being of the class of children for whom they provide, then the School-Board system must be only looked upon as a temporary expedient to meet the urgent requirements of large numbers for whom no other means are at present available."

Dr. Buxton, who was for twenty-five years at the head of the Liverpool Institution for the Deaf, where both day-pupils and boarders are received, stated in evidence before the Royal Commission that he considered five years' instruction as a day-scholar not more than equivalent to one-half the same time spent as a boarder in school, and that, in his view, supervision, continuous attendance, and extra discipline to which the children are made subservient under a boarding-school system are absolutely lost under the day-school system. Lastly, on the Royal Commissioners' own showing (see paragraphs 339, 346, and 352 of their Report), the institution system is to be preferred, and they are forced to the conclusion that institutions are necessary for the teaching of the great majority of deaf children.

In the same paper, a day or two afterwards, Mr. A. Farrar, jr., of Harrogate, known to our readers as an intelligent deaf gentleman, not connected with any school, expressed his approval of Mr. Townsend's views, and added:

Our main argument in favor of the institution system is based on the primary fact of the radical difference there is between the deaf and the hearing child as objects of education. With the latter it in great part consists in merely regulating and reducing to rule the language and knowledge which he is constantly, though unconsciously, imbibing through the hearing—ever responsive, like the *Æolian harp*—with a view to their increased power and usefulness in life. With the deaf, on the contrary, we have literally to create all the conditions that render such an education possible, and even after he has been put in possession of the necessary instruments of learning he needs constant attention, so that he may be guided to a proper use of them, in the absence of the self-correcting power of the ear. Apply this to all that relates to conduct, the formation of character, etc., and it will become apparent that the education of the deaf embraces far more than is understood of those who hear.

Now, I am far from saying such education is impossible under the day-school system, but having regard to the conditions of life among the great mass of the population, progress is slow and intermittent, and the results partial and unsatisfactory, particularly in the early stages of the oral method, when it is employed. It may be said that out of every two steps of advance one is lost, with a consequent increase of work. In the institution system, under the influence of a regular life and discipline, and constant supervision, a maximum of benefits with a minimum of waste is obtained, and in the end the deaf-mute goes into the world better equipped than his day-school fellow, who has had to contend all along with adverse circumstances.

One of the arguments advanced in favor of day-schools is that the constant association with the hearing at school and at home is of great

advantage to the deaf, compared with the feeling of isolation and other disadvantages incident to the institution system. Suffice it to reply that the advantage is more apparent than real, and that on the other hand the disadvantages are so considerable as to more than counterbalance it. The periodical holidays of the institutions are sufficient to provide the necessary antidote to the effects of isolation, etc., and when the deaf leaves for good, the education he has received places him in a better position to associate with the outside world than would otherwise be the case. It is to be feared that the Commissioners, in their Report, were greatly influenced by this view of the day-schools in the uncertain attitude they adopt regarding day-schools *vs.* institutions.

It is well-known that in the United States day-schools for the deaf have usually ended in the founding of institutions, and such will be our experience unless we are wise enough to profit by that of others.

The question of the cost of maintenance as apart from that of education only is no doubt a serious difficulty, but on the other hand the general adoption of the day-school system would be decidedly a penny-wise-and-pound-foolish policy. If the State is to take up the education of the deaf, let it do so in a thorough manner. The least we ask is that either the financial proposals of the bill be so framed as to enable the institutions to compete on equal terms with the day-schools, or the restrictions should be placed on the choice of the school authorities in the matter. Experience will show which gives the most satisfactory results in proportion to the expenditure in each case. * * *

While our object is to place deaf-mutes in a position to compete as nearly as possible on equal terms with those who hear, the methods pursued to that end are so highly special that we cannot regard any bill as satisfactory that does not recognize this fact. The present bill is so unsatisfactory in its details that it will render it not easier but more difficult to further the highest interests of those it proposes to serve. "What man is there of you, who, if his son shall ask him for a loaf, will give him a stone?"

At a "Conference of Representatives and Head-Masters of Institutions for the Deaf and Dumb of England," held at the Yorkshire Institution, Doncaster, November 18, 1890, for the purpose of considering the "Elementary Education (Blind and Deaf) Bill," there was a discussion of day schools, which it was feared might be established under the proposed Bill to the disturbance of existing institutions and the injury of the deaf. Mr. S. Schöntheil, of the Jews' Home, in London, said:

Not very long ago I was asked to inspect the London School-Board classes, fourteen or fifteen in number. * * * Deaf and dumb children want both teaching and educating. These poor children mostly belong to parents who know very little of education, and they would have to receive it before they gave it to their children. These children are brought up therefore in a manner simply indescribable, and painful in the extreme to any one that has a true feeling for these poor unfortunate children—physically, morally, and in every other way. * * * The results

achieved in the day-schools are, to use a German phrase, *unter aller Kritik*—they are not worth criticising. Girls and boys fifteen years old, who have spent a number of years in these day-schools, taught on the oral system, as they call it—taught, as they say, to speak, but which I would call barking or bellowing—will say “This is a dog:” but if you ask a first-class pupil “How many legs has a dog?” you will be told that that is beyond him. This is a correct description of what actually occurs in these day-schools, and God forbid that I should blame the teacher or pupil. It is hardly possible, considering all the circumstances, to achieve more. When the teacher is asked in these day-schools how many he has in a class he will answer nine, and asked to point out the best, he will say, “I cannot point out the best—they are all different standards.” Now I ask you, who have spent your lives in a school-room, whether you could achieve the smallest possible results in teaching a class of children consisting of nine for three or four hours a day at the utmost, all of different standards, in addition to which you must remember that these children attend very irregularly. The whole affair is a farce, and therefore I think we must as educators pronounce against them.

The members of the Conference (at which, however, no representatives of day-schools were present) were unanimous in the opinion that the results of day-schools are inferior to those of institutions. The following resolution was adopted:

That this meeting is strongly of opinion that day-schools cannot meet the peculiar requirements of the education and training of the deaf and dumb in the same efficient manner as institutions, and having regard to the exceptional needs of the deaf and dumb, and the best interests of society in general, we respectfully submit that provision should be made for the enlargement and maintenance of existing institutions, and the provision of additional institutions in such centres as shall best meet the requirements of the deaf and dumb, in preference to day-schools; and this meeting respectfully submits that only where existing institutions are insufficient should additional ones be provided.

Education in England.—On February 9, 1891, a large and influential Deputation from the Doncaster Conference above mentioned waited upon Sir William Hart Dyke, Bart., at the Education Office, and presented the above resolution concerning day-schools and other resolutions adopted by the Conference. Viscount Cranbrook, the Lord President of the Council, was also present, and occupied the chair part of the time.

Remarks were made by Sir Stafford Northcote, the Rev. J. W. Scarlett, Mr. J. Howard, Mr. W. Smith, the Rev. E. W. Dawson, Mr. S. Schöntheil, Mr. W. Strang, Mr. W. Sleight, Mr. E. Townsend, Mr. W. R. Roe, Lord Egerton of Tatton, Mr. W. G. Meller, and Mr. W. S. Bessant.

The other points presented were the desirability of the Gov-

ernment's availing itself of the advice and assistance of experienced teachers in drafting the Code, the extension of the age of compulsory attendance to sixteen, and the encouragement of technical education.

The Deputation were cordially received, and were assured by both Sir William Hart Dyke and Viscount Cranbrook that their views would receive full consideration. A prominent English instructor, who was a member neither of the Conference nor Deputation, writes in a private letter concerning the Bill, which has now been read a second time in the House of Lords :

I had rather the bill had taken a more comprehensive view of the subject, and followed the example of your own country. But we, here, cannot begin anything, as you can, *ab initio*, and must add to and compromise, patch up old machinery, consult vested interests, and so produce a somewhat hybrid measure. But I am yet hopeful that the bill itself is capable of introducing a very much higher status in the education of the deaf than has yet been reached, and of leading the way to a fuller and more complete recognition of deaf-mute education than has been usual in this country.

The Opinion of the Intelligent Deaf.—In the last number of the *Annals* (page 79) Mr. O. Hanson asked Mr. L. Cappelli, of Siena, to address certain questions to certain deaf gentlemen whom he named as fairly representative of the intelligent deaf of Italy. Mr. Cappelli has courteously complied with this request, and in *L'Educazione* for March, 1891, publishes the result. Two of the gentlemen questioned declined to express an opinion; the remaining three substantially agreed in saying that the deaf instructed by the pure oral method are not as well informed, nor as well developed mentally, as those taught by the manual method; that many of them after leaving school are compelled to fall back upon writing and gestures as a means of communication, and that, while speech and speech-reading are desirable acquisitions, the sign-language ought to be used as a medium of instruction, at least during the early part of the course. Mr. Cappelli candidly gives their replies in full, except in the case of one gentleman, Mr. F. Micheloni, who for answer refers to a book he has recently published, *Sull'Educazione dei Sordomuti*, Rome, 1890, in which similar ideas are expressed at too great length for republication. Mr. Cappelli takes occasion to express his own entire dissent from the opinions of these deaf gentlemen, and to give his reasons therefor.

The Term "Combined System."—Mr. T. S. Doyle, Principal of the Virginia Institution, writes us as follows :

In the classification of the institutions as to "Methods of Instruction" which appears in the January number of the *Annals*, I find the Virginia Institution set down in Class "B," and a foot-note quoting from my statement upon the subject as follows: "*Manual*. Lessons given to certain pupils *by* articulation. No *combination* of the two methods."

Doubtless, this quotation is given correctly. I should have been more careful in making it. But the effect of it is misleading.

We have here no such thing as a "Combined System," as the term is now used, *i. e.*, to mean that instruction is given to our pupils by means of any *combination* of the Manual method (under which I include both signs and spelling on the fingers) with the Oral method; all of the instruction that is given in the class of pupils in articulation is *in articulation* and *lip-reading*. No effort is made to teach them anything else. Of course they do learn some things, some facts, some language, as they go along. But I mean that the only thing they are expected to learn in that class is how to articulate themselves and how to read the lips of others. Instruction in spelling, reading, definition, geography, scripture, history, and composition is all given in the manual classes.

Upon examination, pupils in the classes *in* articulation and lip-reading are examined *solely* with reference to their progress in those two things. In the other classes, the manual classes, they are examined upon their knowledge of facts and ideas acquired during the period of time they are being examined for.

This I do not consider could be classed under the "Combined System."

Mr. Doyle's understanding of the meaning of the term "Combined System" is different from ours. Our understanding of it has been frequently stated in the *Annals*, and is accepted by the great majority of the members of the profession. As it may be found in the last number of the *Annals*, page 65, it need not be repeated here. In our annual classification of the schools by methods, the term is applied to those schools in which an important place is given in some form or other to speech and speech-reading, but the sign-language or the manual alphabet, or both, as well as writing, are employed more or less as means of instruction with all or a part of the pupils. Each of the various methods included under this general head is carefully defined, and for convenience of reference they are designated as "A," "B," "C," etc. Under this classification the method of the Virginia Institution, as Mr. Doyle now explains it, should be recorded as "A."

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Deaf Pantomimists.—The French periodicals have recently devoted considerable space to the discussion of the question

whether the career of professional pantomimists is one in which deaf persons can successfully engage. In favor of the idea is the familiarity of the deaf with the language of signs and their readiness in making themselves understood by pantomime; but some managers of theatres who have been consulted raise the objection that in their gestures and other action the deaf cannot keep time perfectly with the music of the orchestra, a feature upon which depends much of the charm of the pantomime for hearing spectators.

Is there a Bacillus of Deaf-Mutism?—Dr. Hermann Gutzmann, of Berlin, reviewing in the February number of the *Medizinisch-pädagogisch Monatsschrift für die gesamte Sprachheilkunde* Dr. A. Schwendt's recently published *Ueber Taubstummheit, ihre Ursachen und Verhütung* (Deafness, its Causes and Prevention), Basle, 1890, says:

After a critical consideration of the influence of heredity and consanguineous marriages, of alcoholism, poverty, and unfavorable hygienic circumstances, especially damp dwelling-houses, the author gives special attention to territorial influences.

The remarkable geographical distribution of deafness suggests these influences. Neither unfavorable social circumstances nor the greater proportion of consanguineous marriages can explain the strikingly more frequent prevalence of deafness in narrow mountainous valleys. The unfavorable social circumstances do not always exist, and the consanguineous marriages are found upon certain small islands where deafness is not endemic. Bircher's observations with respect to the character of the ground and the drinking water—the excellence of which depends upon the character of the ground—point out a definite cause both of goitre and of deafness.

Kocher's investigations, it is true, have not sustained Bircher's in all respects. Kocher distinguishes between goitre wells and anti-goitre wells. Men and animals that drink the water of the latter remain free from goitre, even in a region otherwise a goitre region, and "form solitary oases in the midst of a population heavily afflicted with goitre." The bacteriological examination of the goitre wells made by Tavel, a pupil of Robert Koch, showed that they contained germs, bacteria, and fungi in a far greater proportion than the so-called anti-goitre wells. The author asks with good reason: "Will these goitre wells prove to be the sources of the endemic deafness of mountainous regions? Will the bacillus of deaf-mutism at some time be discovered? * * * It is certainly of great interest to compare with the abundance of fungi and germs in the microscopically pure [qu. impure?] goitre wells of the canton of Berne the fact stated by H. Schmaltz that in the kingdom of Saxony most deaf-mutes reside near polluted water-courses." In fact, it is not improbable that the bacilli which may be conveyed by the drinking water into the passages

of the throat and thence into the Eustachian tube are a cause of deafness, just as they frequently produce catarrh of the middle ear, consequently deafness, after scarlet fever and diphtheria. The same is true of typhoid fever and especially of cerebro-spinal meningitis, the infection of which very probably proceeds from the throat. The author mentions also the prevalence of diseases of the nasal passages and the throat among the deaf.

The Prevention of Deafness.—In the review above mentioned, Dr. Gutzmann continues :

In the second part of the work Dr. Schwendt treats of the prevention of deafness. Since the greater portion of the deaf are undoubtedly not so from birth, much deafness can perhaps be prevented by prophylactic measures. The author, after a brief description of the oral education of the deaf at the present day, proceeds to a consideration of such measures. Some of these have already been suggested in the first part. One passage may be quoted here : “ Very many causes of deafness, as is continually becoming more and more evident, are to be sought in the cradle. Neglected diseases of the throat, ears, and nasal passages in little children lead to early deafness and consequent dumbness, which by prompt treatment might often be averted. A great field of beneficence is here opened to the children’s physician and the practical country doctor, as well as to the specialist. With the improvement of popular hygiene and a more intelligent care of the child great results may be expected in this direction.

The Twelfth Convention.—The “ Proceedings of the Twelfth Convention of American Instructors of the Deaf and the First International Convention in America ” have been published with commendable promptness by the New York Institution. Though the amount of material is greater than that of any previous Convention (352 closely printed pages), we think the publication never followed the meeting so quickly as this has done—a result alike creditable to the efficient Secretary of the Convention, Mr. E. H. Currier, to the competent head of the printing department of the Institution, Mr. E. A. Hodgson, and to the pupils who did the work. It was no slight task to edit these Proceedings, and the members of the profession are greatly indebted to Mr. Currier for the faithful and satisfactory manner in which he has performed this labor of love.

A carefully prepared index adds to the value of the work. Through the generosity of the New York Institution the volume is presented to American instructors, and will be sent free to any address on receipt of ten cents to pay postage. Copies will also be sent free to the foreign subscribers and exchanges of the *Annals*.

The Promotion of Speech.—A meeting of the Board of Trustees of the "American Association to Promote the Teaching of Speech to the Deaf" was held in New York, February 16 and 17, 1891. We have received no official report of the proceedings; the following is gleaned from the newspapers:

All the members were present, viz., Dr. Alexander Graham Bell, President; the Hon. Gardiner Greene Hubbard, and Miss Caroline A. Yale, Vice Presidents; Mr. Z. F. Westervelt, Secretary; Mr. David Greenberger, Miss Ellen L. Barton, Dr. Philip G. Gillett, Mr. A. L. E. Crouter, and Miss Mary H. True.

A constitution for the Association was adopted. The object of the Association is therein stated to be to promote the teaching of speech to the deaf, and to this end special literature is to be prepared, published, and circulated; institutes are to be held at schools for the deaf, in which methods of teaching articulation will be explained and illustrated, and summer meetings are to be held, with lectures and discussions. The Association invites the co-operation of all interested in the promotion of its objects. The annual dues are fixed at two dollars. Two hundred names were proposed for membership at this meeting. Dr. Bell formally presented the \$25,000 he had previously promised to the Association.

The De Haerne Memorial.—The *Journal de Courtrai* of December 28, 1890, mentioning the contribution of American friends to the De Haerne Memorial (see the last number of the *Annals*, page 94), calls attention to the gratifying fact that this gift from America in memory of a Catholic prelate comes from Protestants. The Burgomaster of Courtrai also, in acknowledging the receipt of the money, says:

I have been much touched to learn that this offering comes to us from men who, united with us in the same faith without being in the same church, have felt their hearts beat in unison with ours in the recognition of a life consecrated wholly to the relief of suffering humanity.

The American subscription is doubly precious to us for another reason: it comes from a competent source, that is, from charitable and intelligent persons, scholars who themselves are devoted to the welfare of the deaf, and who are thus better able than others to appreciate the inestimable services of our lamented friend Mgr. De Haerne.

Helen Keller.—In the *Hartford Courant* for Feb. 20, 1891, Dr. Job Williams, Principal of the American Asylum, publishes

the following account of a recent visit to this wonderful child of genius. The testimony of Dr. Williams will doubtless be accepted as conclusive by even the most skeptical of our readers, some of whom have suspected that the marvellous reports of her progress that have appeared from time to time in the *Annals* were not free from exaggeration :

It was my privilege a few days ago to call on Helen Keller, the deaf and blind girl, who has attracted so much attention among philanthropic and scientific people for the past three or four years. Much has been written of this marvellous child, much that, judged by all ordinary standards of attainment of deaf-mutes, or even by the attainments of the occasional brilliant exceptions, seemed almost incredible. I must confess that before I saw her for the first time, a little more than a year ago, I could not believe that the reports concerning her progress in language were not grossly exaggerated, but after seeing her and talking to her myself through the manual alphabet I was prepared to believe almost anything regarding her progress in that direction. I never knew of a child deaf at so early an age as was Helen (sight and hearing were both lost at the age of nineteen months through disease) who made such rapid progress in the knowledge of the English language. It was simply phenomenal.

But the greatest wonder was yet to come. Soon we heard that Helen was trying to learn to talk. That seemed to be the most absurd thing in the world. To think of teaching speech to a child totally deaf and blind was preposterous. Yet that seemingly impossible thing has been done. The age of miracles is not yet past.

Last Monday morning I sat down beside her and carried on a running conversation concerning a great variety of subjects for nearly half an hour, and during all that time her part of the conversation, which was animated and sprightly and full of fun, was conducted entirely by speech, and speech so distinct that I failed to understand very little of what she said. She seemed never at a loss for language to express an idea, nor even to hesitate in giving it orally. It was an intelligible speech in a pleasant voice, and it was wonderful. In the course of our conversation, Helen informed me that she could play on the piano, and when I asked her to play for me she sat down and played the air of a little song with her right hand, playing the same part with her left hand an octave below. It would hardly pass for first-class music, the time not being very accurate, but it was music. Then at my request she sang for me a line of the song she had just played, and the singing was more accurate in time, though less so in tune, than the playing.

Her memory is as remarkable as her grasp of language and her power of speech, and probably is the chief source of her success in both these. She grasps an idea almost before it is given her, and once hers it seems to be ineradicably fixed in her memory. A few days ago a book of poems printed in raised letters was presented to her. She opened it and read the first poem over twice, reading it aloud as she passed her finger over the lines. Then the book was laid away, and not referred to again until the next day, when it was found that she could repeat the whole poem of seven stanzas of four lines each without missing a word.


Laura Bridgman was a brilliant example of what may be accomplished under great difficulties. Helen Keller is a prodigy. There is no one, nor ever was any one, to be compared with her.

Articles in "Science."—The discussion in *Science* of subjects relating to the deaf has continued during the past quarter. The first twelve articles were noticed in the *Annals* for October, 1890, pages 301–303, and for January, 1891, pages 80–87.

13. In *Science* for January 23, 1891, Dr. B. Engelsman replies briefly to some of Dr. Gillett's remarks on the oral method. He corrects Mr. Hubbard's statement that the school at Chelmsford was the first oral school established in America, saying that one was opened previously in New York, at No. 427 (old number 415) Eighth avenue. This "was in operation in the fall of 1864, consisting of two boarding and three day pupils."

14. In *Science* for January 30, 1891, Dr. Philip G. Gillett argues at considerable length that deafness, "once a calamity, is now, to those deaf persons who improve the privileges and opportunities they enjoy under our civilization, reduced to a very serious inconvenience." He cites the testimony of several intelligent deaf persons sustaining this view. He sees "no reason why, among the many sufferers from various physical defects, the deaf alone should be restricted in the exercise of preference in the most sacred of all human relations, the marriage relation, either by legal enactment or public opinion, which has almost the force of law." He objects to Dr. Bell's comparison of the cost of educating the deaf, "two hundred dollars a head," with that of hearing persons, "twenty dollars *per annum*," on the ground that "the two hundred dollars charged to the deaf pays for his entire instruction and support, which is done for his hearing fellows in the home, the church, the school, the mart, the shop, the social circle, the lecture, and on the play-ground." He complains that the statistics from which Dr. Bell's deductions concerning heredity have been made are defective and misleading. Dr. Gillett has gained additional information concerning his own statistics published five years ago, which somewhat changes the conclusions drawn from them at that time. He now presents the following :

I have had 2,158 pupils, of whom 1,580 have been discharged from the Institution. No doubt a considerable number of these have contracted marriages of which I have not received information, but I have learned of the marriage of 378 of them. They were parties to 233 marriages.



Thirty-three married hearing partners. Of these, seven were congenitally deaf. Of thirty-two of these thirty-three couples, all the children could hear. Of one of these couples, the mother being congenitally deaf, two children could hear and two were born deaf.

Of thirteen couples, both parties were congenitally deaf. Of twelve of these couples, all the children could hear. Of one of these couples, two children could hear and one was born deaf.

Of fifty-one couples, one party was congenitally deaf, and one was adventitiously deaf. Of these fifty-one couples, one couple had one hearing and four adventitiously deaf children; one couple had one hearing and one adventitiously deaf child; three couples had one congenitally deaf child; one couple had two congenitally deaf children.

Of twenty-five couples, both parties were adventitiously deaf. Of twenty-three of these couples, all the children could hear; of one of these couples, one child could hear and one is congenitally deaf; of one of these couples, four children hear and one is adventitiously deaf.

But I have had other pupils whose parents, though deaf, were educated elsewhere. Two sisters born deaf were children of a deaf father and hearing mother. Two brothers—one congenitally and one adventitiously deaf—were the children of deaf parents; but whether the parents were congenitally or adventitiously deaf I have been unable to learn. One boy was adventitiously deaf whose father was deaf, but of whose mother I have no information.

The foregoing may be tabulated as follows :

PARENTS.	OFFSPRING.	
	Congenitally Deaf.	Adventitiously Deaf.
Both parents congenitally deaf	1	
One parent congenitally and one adventitiously deaf..	5	5
One parent adventitiously deaf, one hearing.....	2	
Both parents adventitiously deaf.....	1	1
One parent hearing and one congenitally deaf	2	
Both parents deaf, but whether congenitally or non-congenitally unknown.	1	1
Father deaf, but whether congenitally unknown, but of mother no knowledge.	.....	1

Applying the above to the classification recommended by Dr. Bell and approved by Dr. Gallaudet (*Science*, Nov. 28, 1890, p. 295), while it is difficult to decide as to which class some of them should be assigned, I should say that it appears as follows : In Class 1, two ; in Class 2, twelve ; in Class 3, five ; and in Class 4, one.

15. In *Science* for February 6, 1891, Dr. Job Williams presents some facts relating to hereditary deafness gathered from

the records of the American Asylum. In this table c. = congenitally deaf; ad. = adventitiously deaf; h. = hearing; u. = age at which deafness occurred unknown.

	Number of marriages.	Children congenitally deaf.	Children adventitiously deaf.	Hearing children.	Children whether deaf or hearing unknown.	Whole number of children.	Percentage of children congenitally deaf.
Husband, c.; wife, c.....	52	48	.....	88	15	151	31.78
Husband, c.; wife, ad.	37	5	1	74	7	87	5.74
Husband, ad.; wife, c.....	51	17	.....	102	5	124	13.70
Husband, ad.; wife, ad.	55	4	.....	129	6	139	3.87
Husband, h.; wife, c.....	16	12	.....	52	2	66	18.18
Husband, h.; wife, ad.....	5	.....	.....	16	2	18	
Husband, h.; wife, u.....	1	.....	.....	4	.....	4	
Husband, c.; wife, h.....	26	9	.....	58	5	72	12.50
Husband, ad.; wife, h.....	6	.....	.....	13	.....	13	
Husband, ad.; wife, u.....	23	.....	.....	43	8	51	
Husband, u.; wife, u.....	2	.....	.....	4	2	6	
Husband, c.; wife, u.....	27	9	.....	58	4	71	12.67
Husband, u.; wife, h.....	1	.....	.....	4	.....	4	
Husband, u.; wife, c.....	2	.....	.....	4	1	5	
3*							
Sterile.....	283						
Totals	590	104		649	57	811	12.82

Of the fifty-two families in which both parents are congenitally deaf, twenty-three have congenitally deaf children.

Of the thirty-seven families in which the husbands are congenitally deaf and the wives adventitiously deaf, two have deaf children—four in one family and one in the other.

Of the fifty-one families in which the fathers were adventitiously deaf and the mothers congenitally deaf, seven produced deaf children, and nine of the congenitally deaf children come from two families.

There are fifty-five families in which both parents are adventitiously deaf, and from these have sprung four congenitally deaf children—one in each of four families.

Four of the sixteen families in which the husbands hear and the wives are congenitally deaf have deaf children.

In five families out of the twenty-six in which the husbands are congenitally deaf and the wives hear, there are children born deaf.

Six of the twenty-seven families in which the husbands were congenitally deaf and the state of the hearing of the wives is unknown produced congenitally deaf children.

Of the twenty-six families in which both parents are deaf and have con-

* Three families are reported with several hearing children in each.

genitally deaf children, there are five families in which one of the parents has one deaf parent, seventeen families in which both parents have deaf relatives of the same generation, four in which one parent has deaf relatives of the same generation, and five in which neither parent has deaf relatives of the same generation.

Of the twenty-six families in which both parents are congenitally deaf and have hearing children only, there is none in which either parent has a deaf parent, so far as reported, twelve families in which both parents have deaf relatives of the same generation, eleven families in which one parent has deaf relatives of the same generation, and three families in which neither parent has deaf relatives of the same generation.

Dr. Williams believes the proportion of deaf children born of congenitally deaf parents, as shown by this table, is far above that of the general average of such cases throughout the United States, "owing to causes at work in New England not in operation to anything like the same extent in other parts of the country." He calls attention to the large proportion of sterile marriages given in the table, and says "it is a serious question whether nature alone is responsible for this barrenness."

16. *Science* for February 20, 1891, publishes an open letter addressed by Dr. Alexander Graham Bell to the Hon. William B. Allison, Chairman of the Senate Committee on Appropriations, giving a summary of his reasons for opposing an appropriation asked for by the Columbia Institution to enable it to enlarge its facilities for normal instruction.

17. In *Science* for February 27, 1891, E. A. Fay replies to one of Dr. Bell's statements concerning the Columbia Institution.

18. *Science* for March 13, 1891, contains an extract from the Report of the Pennsylvania Institution for 1889-'90, in which Mr. A. L. E. Crouter explains the difference between the oral and manual methods, and discusses the limitations and restrictions that should be observed in the use of signs in either method. "In oral instruction, except in the earlier stages, signs as a means of communication should be carefully prohibited; in manual instruction they should be used as sparingly as possible at all stages."

19. *Science* for March 13, 1891, publishes President Gallaudet's Circular of Information concerning the establishment of Normal Fellowships in connection with the National College.

20. *Science* for March 20, 1891, publishes an address on Marriage, delivered before the Literary Society of the National

the records of the American Asylum. In this genitally deaf; ad. = adventitiously deaf; h. = age at which deafness occurred unknown.

	Number of marriages.	Children congenitally deaf.	Children adventitiously deaf.	Hearing children.
Husband, c.; wife, c.....	52	48	.....	88
Husband, c.; wife, ad.....	37	5	1	74
Husband, ad.; wife, c.....	51	17	.....	102
Husband, ad.; wife, ad.....	55	4	.....	129
Husband, h.; wife, c.....	16	12	.....	52
Husband, h.; wife, ad.....	5	.....	.....	16
Husband, h.; wife, u.....	1	.....	.....	4
Husband, c.; wife, h.....	26	9	.....	58
Husband, ad.; wife, h.....	6	.....	.....	13
Husband, ad.; wife, u.....	23	.....	.....	43
Husband, u.; wife, u.....	2	.....	.....	4
Husband, c.; wife, u.....	27	9	.....	58
Husband, u.; wife, h.....	1	.....	.....	4
Husband, u.; wife, c.....	2	.....	.....	4
.....	3*	.....	.....	.....
Sterile.....	283	.....	.....	.....
Totals	590	104	1	641

Of the fifty-two families in which both parents are congenitally deaf, twenty-three have congenitally deaf children.

Of the thirty-seven families in which the husband is congenitally deaf and the wives adventitiously deaf, two have one family and one in the other.

Of the fifty-one families in which the fathers are congenitally deaf and the mothers adventitiously deaf, seven produce nine of the congenitally deaf children come from these families.

There are fifty-five families in which both parents are congenitally deaf, and from these have sprung four congenitally deaf children, each of four families.

Four of the sixteen families in which the husband is congenitally deaf have deaf children.

In five families out of the twenty-six in which the husband is congenitally deaf and the wives hear, there are eleven congenitally deaf children.

Six of the twenty-seven families in which the husband is adventitiously deaf and the state of the hearing of the wives is unknown, have eleven congenitally deaf children.

Of the twenty-six families in which both parents are adventitiously deaf, there are eleven congenitally deaf children.

* Three families are reported with several children.

Deaf-Mute College, by Dr. Alexander Graham Bell. In address Dr. Bell puts aside the question of the possible formation of a deaf variety of the human race as of interest to scientific men rather than to the deaf themselves, and with the immediate results of marriage. He takes occasion at the outset to assure the deaf that he has not, and never had, any intention of trying to have laws passed to prevent them from marrying as they choose. He assumes, however, that they do not wish to transmit their affliction to their children, and shows them how, from the researches he has made, they may gain information which will enable them to increase or diminish their liability to have deaf offspring according to the way in which they marry.

He dwells especially upon the significance of "family likeness" (that is, deafness in more than one member of a family) as indicating a tendency to transmit the defect, regarding it as an indication even more important than that of congenital deafness in the individual. Admitting the imperfection of statistics and the necessity of their verification and completion, he offers the deaf the following deductions from them as probabilities for their guidance :

Whatever may be the character of the deafness in your own family will probably diminish your liability to have deaf offspring—

1. By marrying a hearing person in whose family there is no deafness.
2. By marrying a deaf person (not born deaf) who has no deaf relatives or a hearing brother or sister of such a person.

On the other hand, you will probably increase your liability to have deaf offspring—

1. By marrying a deaf person (not born deaf) who has deaf relatives or a hearing brother or sister of such a person.
2. By marrying a deaf person (born deaf) who has no deaf relatives or a hearing brother or sister of such a person.
3. By marrying a deaf person (born deaf) who has deaf relatives or a hearing brother or sister of such a person.

Of course, if you yourself were born deaf, or have deaf relatives, it is perfectly possible that in any event some of your children may be deaf. Still, I am inclined to think that if you marry a member of a family in which there is no deafness (or only a single case of non-congenital deafness), you will not only have fewer deaf children than if you marry a member of a family containing a congenital deaf-mute, or a number of deaf-mutes, but the deafness of your children will not tend so strongly to be transmitted down to the grandchildren. The tendency to inheritance will be less in the one case and intensified in the other. That is, in the former case your deaf child will have a less tendency to transmit his deafness to his children than you yourself possess ; in the latter case, a great

The address contains other advice and suggestions, and some of the statistics upon which these are based, but as it has been given a wide circulation in the deaf-mute periodicals and has been published in pamphlet form by the Volta Bureau, we need not report it further in the *Annals*.

Visitors in the School-Room.—The articles on this subject in the last number of the *Annals* (pages 39–43, 78, 79) called forth the following remarks from Mr. J. L. Smith, of the Minnesota School, in the *Companion* for January 17 and 24, 1891:

In our School, although visitors are quite numerous, yet they cause the teachers little or no inconvenience. The Superintendent has directed the teachers to go right along with their regular exercises when visitors appear. The visitors' attendant in our Institution is a well-educated and intelligent young lady. She has become familiar with the workings of the school, and is able to explain things and answer questions, so that the teacher is relieved from any such obligation. There are cases, however, where visitors are actuated by more than a spirit of curiosity. They really want to understand the methods of teaching, and it is a pleasure, rather than an annoyance, to give further information to such.

We think that it would hardly be advisable to forbid visitors access to the school-rooms. Our institutions stand in close relations to the public. There is no comparison between them and universities and colleges. To exclude the public entirely from the educational feature of our work might give rise to ill-feeling and suspicion. Restrictions may properly be made, however, limiting visitors to one day, or certain days, in the week. There seems to us a slight tendency to over-estimate the annoyance suffered from visitors. A good teacher, who has his class well in hand, and who himself sets the pupils the example of strict attention to business, will experience the merest trifle of inconvenience from the entrance of outsiders into his class-room.

Since our remarks upon this subject in last week's issue, an additional thought has been suggested to us. The general public are thoroughly familiar with the work of the common schools; they know just what is being done, and how it is being done; for they themselves were once pupils in those schools. There is, consequently, no special reason why they should desire to visit them and inspect the work. But it is not so in regard to our schools for the deaf. The great majority of the people are utterly ignorant of the character of our institutions. By some, they are looked upon as asylums for the care of helpless beings; by many others, they are considered as hospitals for the treatment of physical defects. Few there are who clearly understand the real educational nature of the schools. Now, in order that our work may receive the greatest measure of public support, it is important that the citizens and tax-payers of the State should fully comprehend that our institutions are educational, transforming mentally helpless children into independent, self-supporting men and women. No amount of writing and explanation will

bring people to the desired comprehension so well as a personal visit by them to the school, and especially to the class-rooms. Visitors from all over the State, stopping in Faribault for a few days, and spending a short time in our school-rooms, will carry home to their friends and neighbors a valuable degree of enlightenment as to the character of the school. Ten minutes spent in the school-room are better than pages upon pages of the strongest argument. The slight inconvenience or annoyance experienced by the teacher weighs as nothing against the benefit that will be gained to the school by enlightening and interesting the public. A good-natured teacher will not be annoyed. Let the visitors come.

New German Periodicals.—Mr. Albert Gutzmann, teacher in the Municipal School for the Deaf in Berlin, and Dr. Hermann Gutzmann, a physician of Berlin, began in January last the publication of a monthly periodical entitled *Medizinisch-pädagogische Monatsschrift für die gesamte Sprachheilkunde mit Einschluss der Hygiene der Lautsprache*. It treats of speech, its defects, and their cure, chiefly from a physiological point of view. The publisher is H. Kornfeld, Charité Strasse 6, Berlin, N. W. The price is eight marks a year.

Messrs. K. Franke and O. Kruse, of Schleswig, publish a paper for the entertainment and instruction of the deaf. It is entitled *Hephata*, and appears weekly. It contains stories, anecdotes, puzzles, etc., but a large part of its space is devoted to news of the societies of the deaf which exist in all the large German towns, and to personal items. The price is four marks a year.

A monthly paper of the same character is now published in the German language in New York. It is called the *Taubstummen-Welt-Blatt*, and is edited by Mr. G. Lindemann. The price is 75 cents a year; the address, 220 East 82d street, New York.

Deaf Dogs.—Professor J. C. Gordon, of the National College, calls our attention to the following paragraph in the second of a series of articles on the breeding of dogs ("Extracts from a Doggy Diary") now in course of publication in the Philadelphia *Fanciers' Journal*. The extract is from the number for March 14, 1891:

The fallacy of handicapping a bull terrier on the show bench because he is not pure white is rapidly establishing a breed of deaf dogs of this kind. Breeding for this color is simply a perpetuation of albinism, and

albinos are generally deaf and near-sighted. I have seen entire litters of white bull terriers, the progeny of noted ancestry, which have all been deaf. Yet I have never run across one of any other color, or white with markings, that had this defect. Here is a hint for dissatisfied bull terrier exhibitors. Protest the dogs that have beaten yours on the ground of deafness and the chances are great that you will strike it right, but if your dog is deaf, keep your mouth shut.

The Annals.—The next number of the *Annals* will be published in June, instead of July as formerly, in order to reach most of the schools before they break up for the summer vacation.

Erratum.—In the January number of the *Annals*, page 11, line 1, for “Willie may play,” read “Willie May plays.” We are glad to relieve the author of the reading lesson here quoted from the unjust imputation of having given Willie permission to play with pieces of glass!

E. A. F.

A VOICE TO THE DEAF.

I sat within the church so dim and calm,

And watched the people in their grave content

Listening, each with eager face upturned,

To hear the message sent.

But through the silence deep that pressed me close,

No word of comfort on my spirit broke :

Not e'en for me the anthem's swelling round

The solemn silence woke.

I turned half heart-sick towards the altar there :

I stood alone the while the 'crowd pressed by :

Then from my heart to God through all the pain

Went up a bitter cry.

He heard and answered: on my heart there fell

Peace like a benediction after prayer :

While to my soul the Voice Eternal spake

A message sweet and rare.

I raised my head: a rush of gladness thrilled

My being through. Content, at last, I trod

With slow steps down the dim aisle, while my heart

Bowed with the love of God.

MISS ANNA B. BENSEL.*

* Miss Bensel is deaf. The author of the poem following is her brother.

“I think that line is *very* pretty. Before I came into the First Class I did not know that poems were beautiful. If I opened a book and found poems I shut it up, but now I think they are the most beautiful things in the world.”

This was a girl with more than average comprehension of language, and an unusually poetic nature. All that she needed was to have the fruitful domain pointed out, and she entered at once into the enjoyment of her rightful inheritance.

Another, not especially scholarly, writes: “I am working in the shop. The other girls talk a good deal, but I do not know what they are saying. While I am working I am often repeating in my mind some pieces which we learned in school and some pieces which I have learned myself, and sometimes I am repeating the *Gloria in Excelsis* and *Te Deum*, and some collects.”

We may venture to hope that the voices which this girl hears in her silence partly compensate her for the loss of her companions' noisy gossip.

If the heart of a teacher is set to do this thing he will often find that a slight beginning is followed by an unexpectedly long train of results. With no very definite object beside the general one of furnishing artistic surroundings, a fine bust of Shakespeare was placed in a certain school-room, and has proved of greater service than Mr. Rolfe and all his predecessors in bringing the works of the immortal bard before the little public assembled there. It was not long before he was recognized as a living personality, with something to say on a great variety of subjects. Was the business before the house a lesson upon the career of Julius Cæsar, the class was asked, “Do you want to know what Shakespeare said of Cæsar?” They did, and were given the line—

The foremost man of all this world.

As a gentle breeze came into the room on a bright June morning they heard him say:

The sweet wind did gently kiss the trees.

When their teacher spoke reprovingly of an inattentive and irreverent manner of repeating the service at morning prayer, they were solemnized by—

Words without thoughts never to Heaven go,

and so on and on. Soon one of the number asked that they might have blank books in which to copy “the things that

Shakespeare said." The request was complied with, and, by and by, selections from other authors found their way into these books. These selections were not all metrical. Sometimes it was a lofty thought from Marcus Aurelius, a bit of Cardinal Newman's poetic prose, one of Ruskin's "singing sentences"—anything which happened to occur to the mind of the teacher as possible for her pupils to take and desirable for them to have, and which found favor in the eyes of her young friends. For these volumes were a record of the survival of the fittest. The youthful critics were never obliged to copy anything, but took only what seemed to them good. Hence, these note-books were among their treasures, and were carried home in vacation to delight older brothers and sisters, fathers and mothers—often, doubtless, signally failing to rejoice the hearts of Paddy and Bridget and Mr. and Mrs. O'Brien.

To be sure, work like this takes time, a great deal of time, and it never can be methodically arranged, and heralded by the ringing of a bell, as normal-school teachers appear to think that all good work must be. It is liable to come in anywhere and interrupt anything. And, worst of all, it cannot well have a written examination. There was as clearly defined a purpose in the mind of that teacher to teach the class poetry as to teach them history or arithmetic, but it was not down on the programme, and the quantity that entered into their souls was never weighed nor measured any more than the air was which they breathed or the sunshine that surrounded them.

Our failure to do more in the cultivation of a love of poetry is partly explained by Mr. Augustine Birrell, in the beginning of one of those racy sentences which make his pages so agreeable: "In these bad days when it is thought more educationally useful to know the principle of the common pump than Keats's Ode on a Grecian Urn." We are altogether too devoted to the common pump, and too apt to consider time wasted which is taken from the consideration of that serviceable contrivance.

Minds of the Gradgrind type confound poetry and sentimentality, and sweep away both with lofty disdain, much as if one should include *The Burial of Sir John Moore* and Barham's impertinent parody on it in the same condemnation. In conversation with the writer, a teacher once said, "I will frankly admit that *I* do not like poetry," with an air which implied that this was greatly to the discredit of poetry, and that he

thanked the Lord for giving him an intellect above such foolishness. What could be said to that? The unuttered response which arose in the mind of his interlocutor was a quotation from the address of Wither to his Muse:

Poesy, thou sweet'st content
 That e'er Heaven to mortals lent :
 Though they as a trifle leave thee,
 Whose dull thoughts cannot conceive thee ;
 Though thou be to them a scorn
 That to naught but earth were born, —
 Let my life no longer be
 Than I am in love with thee !

The vast number of teachers who feel that they have done all that is required of them when they have faithfully explained the mechanism of the common pump can really do but little more. A sense of duty will make a person careful to be thoroughly informed himself in the sciences that he proposes to teach, but a sense of duty can never bestow upon him a perception of the divine perfection of poetry. That is a gift from the gods, and without it one can no more develop in others an appreciation of this beauty than a blind man can teach them the art of painting. Much, very much, may be done in developing such an appreciation in our pupils, but only by those who bring to their flocks a portion of the mental and spiritual food which has been as the bread of life to their own souls.

We are aware of the ridiculous aspect which the whole matter presents to our Gradgrind neighbors, who deny not only the utility of the thing if it were done, but also the possibility of doing it in our field of labor. Now, enthusiastic as we are upon this subject, we would not for one moment be understood as saying that we should have tried Milton's sonnets on the mind of "Benson," had the intellectual and moral welfare of that interesting youth been confided to us. We would use every grain of the common sense with which we have been gifted, and daily pray for more. But, because the children in the primary public schools can make neither head nor tail of quaternions, do the demands of common sense require that we should resign the attempt to give them an acquaintance with the multiplication table? Do we not rather, as Mr. James Russell Lowell has said, "expose" them all, bright and stupid, to mathematics, and then follow the guidance of symptoms in their subsequent treatment? In like manner we would have

our children exposed long and thoroughly to poetry, and would wait patiently for results, believing—we may say, knowing—that in a fair proportion of instances we shall not be disappointed. For if we have had much experience in teaching the deaf, we learned long ago that results do not need to be very brilliant to give great satisfaction both to our pupils and ourselves.

In looking at the question, Would it “pay” to devote a much greater amount of time and effort to securing this “element of a good education?” it is extremely difficult to separate this part of our work from the rest. It so constantly involves language teaching, and is so interwoven with ethical training, that it can hardly be considered apart from them, and a system of book-keeping would be very faulty which charged to poetry alone all the time and effort thus expended. But while it is very true that some of the ends which we attain by this means may be reached by more prosaic methods, it is equally incontestable that many of them can not, and these are of such a nature that we do well to hesitate long before consenting to forego them, no matter how high their price.

Poetry presents herself to us as educators with a twofold claim: first, that her influence is as potent as that of religion itself in refining and elevating the human mind and heart; and, second, that she brings to her lovers one of the purest and most abiding pleasures which life has to offer—and this claim is amply supported by the intellectual history of the world. Can we do better than to enlist her co-operation, even though she exacts from us the most unwearied exertions? And, indeed, the service which she calls for is no drudgery. She does not know the word. To work with her is to be in communion with one of the highest sources of inspiration, and her servants agree that no part of their daily task is more delightful in its progress or looks fairer in the retrospect.

There is no fear, however, that, do as little as we may in this line, the majority of our pupils will ever in the future reproach us for the lack. That is the pity of it. If we do not familiarize them in some degree with this high pleasure, they will never know of its existence. A few, whose surroundings after they go from us are exceptionally favorable, will eventually realize with sorrow that we left undone those things which we ought to have done. We remember very well a lament which we once heard from a deaf lady of a good deal of culture, that so little

attempt was made, in the Institution in which she spent ten years, to open her eyes to the beauty of poetry. The small number who, like that woman, finally come to their birthright will say justly :

The schools were sad and slow,
The masters quite omitted
The lore we care to know.

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THE NATURAL DEVELOPMENT OF LANGUAGE: ITS EFFECTS ON ORAL TEACHING.

It has been truly said by a great authority (Hallam) that the chief tendency of all language is to dispense with the inflexion of words and the difficult pronunciations of the powers of words. The former part of this truism has a trying effect on our work of teaching language to the deaf, and the latter in teaching speech. But as Barbonius says of nature so say we of art (for teaching is an art), "*Omnia mutantur*," and so we must endeavor to combat with the inevitable.

The changes which our language has undergone in pronunciation must have been noted by every teacher of the deaf on the oral system and student of orthoepy. Such belong to the natural development of a language. A slight acquaintance with German, or indeed French, Italian, or Spanish, or with the Scandinavian tongue or any of its modern representatives, soon reveals to us the carelessness the English have always shown with regard to the pronunciation and spelling of their words. This fact of the variety of spelling is more particularly seen when we peruse that "boke of holy men," the parish register, which marks the historical tendency to mix speech and spelling.

There are numbers of words, especially in the Teutonic languages, which retain sounds whereof in England only traces now remain in the spelling or in provincial speech. These changes in the language are nowhere so manifest as in the rural districts of England, where we find older modes of speaking and traces of the sister tongues of the Continent. Is it not possible, then, that we can perceive here the origin of certain difficulties many of our teachers meet in their ar-

rangement of the sounds taught in articulation—with some “a” (in mate) is a compound, with others, an element—and in their ideas of the phonetic value of words? Often we find teachers vainly attempting to find some law whereby to pronounce the various letters and combinations of letters which occur in words according to their own ideal standard of speech. However praiseworthy the attempt, it has so far been a fruitless one, for this is a striking case of the exception proving the rule. Thus we have given the rule, that “a” before two or more consonants in a word takes the broad Italian “a” sound as in palm, basket, etc., but see how it would be misapplied to such words as land, fact, etc.

Gutturals.—Amongst the most remarkable changes our speech has undergone must be noted the loss of the gutturals. In bygone days our language was very rich in purely guttural sounds, probably as rich as the German is at the present day, and we yet find some of them retained in the Northern dialects of England and in Scotland; but in the Midlands and the South we cannot muster any but those given us in the grammars of to-day, viz., “g” and “k.”

The Rev. Thomas Arnold in his *Teachers' Manual* has added to the ordinary grammatically arranged list of gutturals the vowels ä, y, à, è, ù, etc. (p. 242). These sounds may be justly termed guttural, for they are undoubtedly formed in the throat, and some of them may be classed among the lost gutturals of this paper.

The “och” of the Irishman is but our English “oh,” the “h” representing the guttural sound now gone; and our “ah” was formerly the German “ach.” Notice how gradual has been the change. Shakespeare is, in this instance, the landmark of variation. In “*Love's Labor Lost*” he makes the formalist complain that his “neighbour calleth him nebour,” from which we learn the double lesson of the loss of the guttural “gh” and the vowel “a” (as in cape). It is evident from this that “gh” once represented a distinct guttural, and we recognize the more remote root-word of the German “nachbar,” wherein we discern, furthermore, the change of the guttural vowel. From “nachbar,” “neighbour” (guttural), to “nebour” (near its present form) we get three modifications of the vowel and lose the “gh.” He would be a bold man who defended this change in the face of our knowledge of such vagaries, for would it not have facilitated our labors considerably had we retained the one

sound "a" (in father) of former times instead of having four sounds for that symbol? I say nothing of the probable development of the German way of pronouncing this word "nachbar." The change in many other vowels is perhaps as marked as in this one, or in some of the consonants, were we only to seek out the originals, for we must remember that our common vowels, a, e, i, o, u, were represented by the elements which we now designate as ah, ay, e, o, and oo. Words containing the ancient pronunciation of these sounds, but with different spelling, are continually cropping up in our articulation lessons, and we call to our aid the unsatisfactory, but nevertheless useful, diacritic marks.

In the words "enough" and "cough" we are reminded of the desire of our ancestors to avoid the guttural, for the final "g" in the German "genug" is sufficient to prove that this representative was not always silent; but here the step has been gradual, and the sound "f" has taken the place of "gh." In Scotland it is got rid of altogether, and we have "enoo" for "enough."

In many instances a guttural sound has been preserved with only a closed consonantal guttural as its nearest substitute, while the guttural vowel has been dispensed with; thus "loch" and "machen" become "lake" and "make." The interchangeable character of "burgh," which has been replaced by "burg," or the more modern "bro," points more fully to the general desire to drop the gutturals.

The above examples show more particularly how the gutturals have been *toned* down; but we have instances where they have been dismissed altogether, as in the word "I." In this case the struggle for its existence has been more severe. Edmund, in "King Lear," is made to say "Che vor ye" for "I warn you," etc., "chill" for "I will" or "I'll," pointing out clearly that in Shakespeare's time there remained the desire to retain the guttural. "Ich" and "Ich'll" naturally developed to "chill," of which we have traces lingering yet in the country pronunciation. Then, again, we may be assured that "gh" in "right," "light," etc., was pronounced by our forefathers with a strong guttural accent, as their equivalents, "recht, licht," etc., are in German.

Aspirates.—Just in the same way in which we have carefully, or carelessly, let the gutturals slip, so have we parted with some of the aspirates. The extinction of the ancient aspirated "d"

and “t,” which are undoubtedly now represented by our *th* (vocal and non-vocal), together with the ready way in which we have discarded the “h” in “what,” “which,” and “rhyme,” show our tendency to change from distinction to difference, which leads us to very odd and tedious results in teaching speech to the deaf, having either to substitute a word of pure phonetic value for the sake of speech, but for spelling to be forgotten, or else to cross out the superfluous sign and distinguish the vowel sound by a diacritic mark, thus: “w^hat” or “w^ot” and “rh^ymè.” What a mental strain it must be to the unfortunate deaf to remember the commissions and omissions of articulation!

It is amusing, too, how paradoxical we have been in some of our changes: “j,” for instance, was once unquestionably pronounced like the consonantal “y” in “yet,” and is now mixed up with the “d” sound, the very phonation we have in other cases thrown out! How this “d” sound crept in is for philologists to say; it would be bold for us to suggest. There it is now, however, to the sorrow of the Frenchman and German alike, and especially to the teacher of articulation. But our Continental friends, too, have been erratic in their choice of a sound for “j,” when we think how entirely different are the sounds in each of their tongues given to this sign. It is this natural development of our language to which we are indebted, perhaps not gratefully, for the very varied forms of the spelling of words and greatly modified pronunciation of our vowels and consonants, which make any attempt to classify such a miscellaneous arrangement of sounds a trying difficulty to teachers of the deaf on the oral system. Yet, without attempting the impossible changes proposed by advocates of the phonetic school, we might make our spelling or speech a little more systematic and thus facilitate our labors in giving speech to the deaf. Who will come forward with definite suggestions for that purpose?

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A NEWSPAPER RELIEF MAP.

RELIEF maps are indispensable to imparting a correct knowledge of geography to children. They can get no clear conception of the earth's surface from ordinary school maps, because they present to the eye only a flat, level surface, and children can see no connection between them and the hills, mountains, valleys, plateaus, and waters which they are told they represent. Unless the young form right ideas of the purposes of maps they do not derive much benefit from the study of geography, and make but slow progress in their lessons. Their elders have learned from travelling that the earth's surface is wrinkled and folded without much regularity, except where mountain ranges conform to the shores of the oceans which they face. But the experience of children is limited, and they do not often, in early life, make deductions from what they observe in nature. Relief maps are expensive, and not always at hand ; moulding boards are excellent in teaching geography, but many teachers are not ready in their use ; how then can we give our pupils definite conceptions of the outward form of the planet upon which we live without these appliances, and make clear to their minds the terms made use of in descriptive geography ?

While seeking a solution of these difficulties it occurred to the writer that an old newspaper could be brought into his service. He accordingly took one, crumpled it up between his hands, and, spreading it out before his class, was surprised to find what a good relief map his old paper had become. Its wrinkles and irregular surface looked very much like those depicted upon a relief map found in school geographies ; but the newspaper was better, for the projections, which were only drawn upon the map to deceive the eye, stood out in actual relief upon the surface of the paper. On it could be found mountains, hills, valleys, plateaus, and ravines, and where chance had not done enough for the teacher a little artifice helped him out.

The pupils were told that the land of the earth is wrinkled like the wrinkles of the paper, and that these wrinkles have different names. The pupils had been at school for some time and readily understood what their teacher intended to illustrate. He pointed to some of the prominent projections of the paper

and asked them to name them. This they were able to do with considerable promptness, and the teacher, having found that his improvised map answered his purpose, proceeded to develop its resources in the further instruction of his class.

The pupils were told that the table might be taken to represent the ocean, and that the newspaper might be taken to represent the land, which rises above the waters of the ocean. They were told that everywhere the land is full of wrinkles like those in the paper, only much larger, but that the fact is not so noticeable, because the wrinkles of the earth are so much larger than those of the paper. He next told them that the names of the wrinkles, or features, of the earth depended upon their situation or formation, and proceeded to name to the pupils the different prominences and depressions to be found upon the paper. Pointing to the most elevated parts of the paper, he told them that they represented mountains, and that the lower parts between the mountains, where the surface was nearly or quite level, represented valleys and plains. A plain upon or near the summit of a mountain was called a plateau. This was formed by levelling off a mountain by flattening its top. They were told that a valley differed from a plateau only in elevation, that plateaus were always found near the tops of mountains, and that valleys were the level lands lower down towards the bases. A number of both were easily found and designated upon the newspaper.

Then a long, narrow depression was found, extending from the higher part of the paper to the edge, where it touched the table; this was called a ravine. They were shown how the sides of the mountains sloped towards the ravine, making a water-shed; that when it rained, or the snow on the mountains melted, the water ran into the ravine and formed a river; that the place where the ravine opened on the table was the mouth of the river; and that the sources of most rivers were among mountains, where the rain and snow fall was the most abundant.

A large, hollow place, in which water could collect and stand, was found and called a lake. A little notch in the rim of the lake, leading out of it into a ravine running down towards the shore, was called an outlet. If the teacher wishes to make the illustration more complete, he can use a little sand to fill up the basin of the lake and the bed of the ravine to represent water.

A glacier can be represented by making a long, sloping ra-

vine between the sides of the mountains, in which pieces of crayons may be laid, end to end, to represent the substance of the glacier. The paper should be previously so elevated that the crayons will slowly slide down the ravine. Then tell the pupils that a glacier is formed by snow, which falls upon mountains and slides down their sides into the upper end of a ravine, and that its mass is pushed slowly along by the weight of the snow in its upper channel. If it is wished to show how icebergs are formed, protract the glacier to the edge of the table, so that the crayons, as they are pushed down the ravine by their own weight pressing from behind, shall fall upon the table. Tell them that those that fall upon the table float away on the ocean, and are the formidable icebergs which often do so much damage to shipping by destroying vessels and drowning the crews. The pupils should be told that icebergs come from the far north, where the weather is so cold that the glaciers do not melt as they do farther south, but extend from the summits of the mountains into the ocean, where they are broken off by the action of the waves and tides.

A volcano may be represented by covering the thumb of one hand with the paper and grasping it with the palm of the other. This will give the requisite conical shape common to volcanoes. A crater may be fashioned by depressing the apex so as to give it a cup form. An active volcano can be made by painting the bottom of the crater with red ink to represent molten lava.

Our newspaper may be made of still further service by so arranging and shaping the outer borders which come in contact with the table as to represent gulfs, bays, capes, straits, peninsulas, etc., and the pupils will derive almost, if not quite, as much benefit from the newspaper as from a moulding board. By this homely method the teacher can correctly and permanently impress upon the minds of his pupils the leading facts of both descriptive and physical geography.

But enough has been indicated to suggest methods for the prosecution of geographical studies with newspapers.

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SCHOOL-ROOM EXPERIENCES.

THE position of a teacher, in any grade or phase of the profession whatever, is a difficult one, providing he or she is thoroughly imbued with the spirit of the work, and regards it not as the mere avenue through which dollars and cents accrue, but one in which minds are the material to work upon, and the buildings to be erected are not only the career in this world, but also that in the world to come.

While not underestimating the parental and home influence on children, I venture to assert that many are either made or marred by the training received in the school-room. Hence, a keen insight of character is one of the essential requisites of a teacher. If it be correctly stated that no two leaves are of precisely the same form, how much greater is the diversity of the human mind! Some youthful minds need a great deal of encouragement, and a helping hand ever held out to coax forward and assist their tottering steps; then the gradual withdrawing of assistance until they are beguiled into thinking and acting for themselves. Others require to be checked and often made to retrace their steps, and this with a gentle but firm hand, so that the enthusiasm (which with some, once damped, is so difficult again to fan into a flame) may not be quenched, but directed into the proper channels and made subservient to system and thoroughness.

While some require strict disciplining, or to be made to feel that "the iron hand is beneath the silken glove," and that paying strict attention to commands given and tasks assigned is the only path in which they can comfortably and safely walk, other minds of a much finer calibre (though, perhaps, not so well fitted to battle with the world and carve out their own future) are controlled by a look or tone, and would wither and droop under an open rebuke or chastisement. Although many, doubtless, through the impetus given in the school-room by a judicious teacher, develop into active, self-reliant, ingenious, literary, and otherwise noble and useful members of society, are there not some whose mental and moral growth is blighted by the perhaps well-meaning but incompetent teacher?

How skilful, then, should be the workman having such various and delicate material to handle, and the effects of whose work are of such vital importance, not only to those directly en-

trusted to his care, but to the whole human family, since all are more or less affected by the success or failure of each individual member.

If the position of a teacher of speaking and hearing children is difficult, where mind can speak directly to mind through language (characterized by some writer as "the gulf twixt man and the ape which no Darwinian theory can bridge over"), and all the different aspects of a subject be presented in words clear and intelligible to the pupils, how much greater must be the difficulties of one who attempts to teach those who have no idea of speech, and many of whom have never even heard the sweet sound of their mother's voice. It is hard to realize the position of those whose ears have been closed to all the delightful tones of companionship, and have no conception of the many voices of animate nature around.

Hearing children entering school at from five to seven years of age possess a command of language that it requires the deaf-mute years of unremitting labor, on the part of both teacher and pupil, to acquire. They are familiar with the names of objects, animals, etc.; in fact, possess a vast amount of information; thus the teacher at once possesses a broad avenue of communication with the pupils, and the process of drawing forth ideas and storing the mind with valuable and useful information can flow on in an easy current. The deaf-mute, however, enters school with no language whatever, often not knowing his own name, and every word and sentence acquired by him are prized by the teacher as little rills that will unite, and after a while form a channel of communication between him and his fellow-beings.

Taking possession of a class of deaf-mutes for the first time, you feel as if landed on the shore of some foreign country, look about with a dazed expression, and wonder if you ever will understand and be understood by those around.

Twenty pairs of eyes (the average number of pupils in our classes) scan your countenance and watch your every movement, and if they have been at school during any previous session your measure is quickly taken.

Now come the difficulties of arousing their interest, gaining their confidence, and retaining their attention. Having, to some extent, familiarized yourself with the work already gone over, you ask some very simple question. If you chance to use the same words placed in precisely the same order as have been

used before, the probability is the answer will, in a majority of cases, be the correct one. Should your question vary in the least from what they have previously seen, or should it be an entirely new one (though, perhaps, much simpler than many that can be readily answered), blank looks will meet you, and, provided you are quick enough to catch him, you will likely see some little fellow calling you "ignorant," "crazy," "fool," etc., to the no slight amusement of his fellow pupils. For instance, you ask, "What is the matter with you?" all go to work and answer like a flash; but should you happen to ask, "What ails you?" you may find all completely at sea.

It does not at first seem possible that the slightest difference in the arrangement of words will so puzzle them, and, after repeated discouragements and failures to get them to understand, you are tempted to throw up the work in disgust. But here you must remember that speaking children are constantly hearing others ask and answer questions, narrate facts, etc., using many different forms of expression, and are also doing so themselves, thus, from infancy, being trained in the idioms of our language, while those you are attempting to teach have but lately commenced the acquisition of language, and have only their eyes and the teacher to guide them. Every new word or exercise has to be illustrated, taught, drilled on again and again, until it seems as though the very desks must comprehend it; then you may review the work, and will likely find some have not yet grasped it. You must go back, drill again, present the subject in some other way so as not to allow the interest of the class to flag, and you will, after a while, accomplish what you are aiming at.

Some pupils will perform their work in a slipshod, careless manner, paying little heed to the use of capitals, punctuation marks, manner of writing, etc. Each of these mistakes must be pointed out and corrected, not only once, but *every* time they occur; also the pupils themselves must be required to make the corrections. The patience of the teacher will be severely taxed by seeing those who are done quickly communicating with each other and attracting the attention of other members of the class. Often some of the tardy writers are deserving of more praise than many of those who are quickly done, and must be encouraged in such a way that they will not be disheartened at their own tardiness nor check the ambition of those who were first. There must be winners in

every race, and if there were none who excelled, competition, the stimulus of the race, would soon disappear. Some pupils will seem so careless and indifferent that you really despair of ever accomplishing anything with them; they require to be coaxed, urged, and often compelled to throw off their sluggishness and go to work with a will. This, even with speaking children, whom one can reason with and appeal to through many channels, is often a work of very great difficulty—how much greater with the deaf-mute only those who have attempted it can ever realize. The remark is often made that, as a class, deaf-mutes are very stubborn. Are we not all more or less so when the attempt rashly to guide us is made by people whose motives we do not understand and who seem always to rub us against the grain?

The ingenuity of the teacher is often taxed to the utmost to devise modes of presenting the simple exercises of the school-room in such a way as to stamp them ineffaceably on the minds of the pupils, and neither weary them by too much uniformity nor confuse them by too great variety of expression.

It is absolutely necessary to repeat again and again one form of expression, style of question, etc., until it is indelibly stamped on the minds of the pupils, then vary the expression, repeating the process until all are familiar with the various modes used in everyday life. Change of work rests the mind as well as the body, therefore it is not wise to keep the pupils too long at one style of exercise. By so doing their interest and attention are often only forced, and while their eyes may be on the work before them their thoughts are far from it. A change of posture, a few moments devoted to calisthenics, a hearty laugh, or some other simple expedient, instead of being a loss, is often a great saving of time, as it arouses and enlivens a class and keeps the faculties of the pupils on the alert. Every exercise should be definite, neither grasping too much nor attempting too little, but such as will leave a distinct picture on the mind and memory of the pupils. From the known, proceed to the unknown, carefully linking each exercise in any subject to the preceding one, and selecting, as far as possible, words, expressions, and facts met with in everyday life.

The teacher must always bear in mind that the goal to be arrived at is the training of the pupils in the use of language, so as to be able readily to communicate with those about them, and intelligently read books, papers, etc., thus enabling them

to carry on their education when the school-room period is past. Many persons often ask, "What do you teach the deaf and dumb? Do you teach them arithmetic, geography, history, etc.?" My reply has always been, "We endeavor to teach them language, to give them the means of intelligently communicating their wants, wishes, etc., and exchanging ideas with their fellow-beings."

Arithmetic, geography, history, etc., all serve as distinct pivots, around which circles of words may move, enlarge, and multiply, until all the pupils are familiar with the many phrases, idioms, and diverse forms of expression that are constantly met with. The storing of the mind with facts in any subject is of only secondary importance; for of what use are bare facts if the possessor cannot, by clothing them in words, convey them intelligently to others and utilize them when necessary?

All exercises, therefore, must be lessons in language, beginning with very simple forms, and advancing step by step until the ban condemning deaf mutes to a species of social ostracism on account of their inability to communicate with their fellow-men is removed, and they can readily exchange ideas and enjoy the pleasures of social intercourse. Exercises given with a view to incite rapidity and stimulate a class should be such as depend largely on memory and require little thought; while those intended to develop the thinking powers should be given a reasonable time to accomplish, as anything reasoned out by the pupils themselves, even if it consumes a little more time, is of infinitely more benefit to them than the extra work that could, perhaps, with a little assistance, be performed in the same time. Always requiring a complete sentence as an answer to a question is an invaluable assistant in teaching language. Composition is thus being constantly taught the pupils, even in arithmetic, which affords a wide scope for diversity of expression, and by always requiring the work and explanation in full, on slates or papers, may be converted into a very valuable language lesson. All errors of expression, spelling, etc., must be pointed out, and the pupils required to make the correction themselves, not only once, but again and again, no matter how wearisome and useless it sometimes seems. A constant dropping wears a stone; so constant repetition will, after awhile, stamp the correct form on even dull and careless pupils.

By always insisting on neatness, cleanliness, punctuality, and orderly deportment, the pupils are trained in systematic

and orderly habits that will adhere to them in after life, and insure them some measure of success in whatever situation they may happen to be placed.

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READING FOR THE LITTLE ONES.

READING is a well-worn subject. It has been discussed in all its bearings until it would seem that nothing more remains to be said concerning it. Yet it is hoped that its application in this paper may embody some ideas that are worthy of careful consideration.

In the majority of cases the love of reading is developed at a very early age. Paradoxical as the statement may appear, many a child forms a fondness for reading before it has learned to read. That family must be poor indeed in which the little ones are not well supplied with alphabet blocks, and with various kinds of colored picture-books. To these, in many instances, may be traced the first tendencies of a child toward a taste for reading. The little ones are first attracted by the bright colors of the pictures, then by the pictures themselves. Later, they wish to know what the pictures represent. Papa, mamma, or older brother or sister will tell them. Then, when they learn their letters and begin to read a little, they will take up these favorite picture-books with new interest, and study out for themselves the words and short sentences. Each recurring birthday and Christmas day brings newer and more interesting books to take the place of the old. Thus the interest of the children is held, and they glide, by "just gradation," from the mere picture-book to the story-book, and the reading habit is practically established.

Another most potent factor in developing a taste for reading is example. All have noticed the little tot of three summers or so, gravely sitting in a corner,

Industriously readin' a paper, a-holdin' it upside down, in imitation of papa. Such a sight should be hailed with pleasure, as a favorable augury of the future. A family in which the older members are regular readers, in which the centre-table is covered daily with books, magazines, and papers,

Will be more certain to develop the reading habit in the children than a family where these inducements are wanting.

But, it may be asked, how does this relate to deaf children at school? That is what we are coming to. In our schools for the deaf great attention is given to the subject of reading. Libraries and reading-rooms are provided with the choicest juvenile literature. In and out of school the pupils are urged and encouraged to read. Able articles have appeared in our professional literature discussing how best to teach the deaf to read, how to cultivate a taste for reading among them, etc. Experienced persons, thoroughly conversant with the needs of deaf children, have given carefully prepared lists of books suitable for the school libraries. Nevertheless, it must be admitted that these efforts, so excellent in themselves, fail to reach the most fruitful soil of all, the very youngest pupils. These little ones are denied access to the libraries and reading-rooms on the plea that they will only deface the books and papers while deriving no benefit from them. Let us go a step further, and inquire what proportion of the amusements and entertainments so liberally provided by the institutions are really suited to the comprehension of the youngest pupils. The occasional lectures by the teachers; the in-door games—chess, checkers, authors, halma; the out-door games—football, baseball—are beyond them, either intellectually or physically. It is the more advanced pupils that receive the chief benefit from all such diversions. Yet who will deny that the little ones really need the most amusement, and that they offer the most promising field for planting useful impressions?

In the matter of fostering a reading habit among our youngest pupils, we must confess ourselves greatly lacking. A distinction must here be made between the ability to read and the love of reading, between the teaching how to read and the cultivation of a fondness for it. Pupils may be taught to read intelligently while no real desire to read accompanies the acquired faculty. As far as concerns the best method of teaching reading this paper does not propose to say anything, except to recommend what may be called the reproduction method. By this method an incident, an anecdote, or a short story is presented to the pupils to be read, not studied. Then they are required to reproduce it in their own language. Such an exercise, employed from first to last, will be invaluable in more ways than one. It will prove the death-blow to me-

chanical memorizing, and if pupils acquire the ability to reproduce in their own language something that they have read over carefully they have learned *how* to read.

Let us now return to the little ones and their reading. In order that a child may learn to love a thing it must be presented in a pleasurable and attractive form. The attempt to render the little ones fond of reading by making it a regular school exercise will fail of its object in most cases. We must never forget that the routine of the school-room is wearisome to children. There may be some who are really fond of study, but we must consider them as phenomena. Most children are human, and since the days of Adam work has been regarded rather as a necessity than a pleasure. Therefore, any attempt to cultivate a genuine fondness for reading, if made in the school-room, must come in the form of welcome relaxation from regular study and discipline.

Each school-room of the lower grades should be supplied with pictured alphabet blocks, illustrated A, B, C books, and picture-books of various kinds, such as are published so abundantly. At certain periods during the day let the regular exercises be suspended and discipline relaxed. Bring out the blocks and picture-books from the closet. Distribute them among the pupils. Give the little ones a real jolly half hour among the pictures. Let a cluster of them gather around the teacher, who has a nice picture-book in hand. Encourage them to spell out words, to make comments, to ask questions. If they become a little noisy, bear with them; they are happy and interested. The ingenious teacher will readily discover many devices for increasing the interest and pleasure of these half hours. The children will learn to look forward to these intervals with anticipation, and they will entertain none but the pleasantest associations with the picture-books. The first step is thus taken toward instilling a love for reading.

Now, what can be done in this line outside of the school-room? On Sundays, on stormy days, the older pupils have recourse to the library and reading-room. Every one knows that the little ones, with a lack of amusement, are then most fretful and unmanageable. Let the officer in charge have a supply of A, B, C picture books of different kinds. Let the little ones apply for them and obtain them, making them promise to use them carefully. By following such a course

the children will come to regard books as entertaining companions when they most need entertainment.

It would well repay every institution to subscribe for a sufficient number of copies of a simple Sunday-school paper. There are many such published for the infant classes of hearing Sunday-schools. These papers are nicely illustrated, and the language is of the simplest. Every Sunday these could be distributed among the children for their own use and pleasure. The instinct of ownership would incline many to examine them and try to read a little. Judicious encouragement on the part of officers and teachers would be productive of much benefit.

Every teacher should be dissuaded from attempting to make library-books a part of the regular school routine, even so far as requiring pupils to give an account of what they have read. If they will do so voluntarily, well and good; commend them. But do not demand it. Writing is no better than drudgery to many, and especially original writing. Many careful, thoughtful, intelligent readers are poor writers. The fact that they cannot reproduce what they have read in written form is not a convincing proof that they do not understand what they read. Requiring pupils to reproduce in the class-room, in the form of writing, the substance of their library-books, may create a distaste for reading, in some cases, through the association of drudgery. For such exercises it is always better to have regular readers, with selections of appropriate length, such as are used in the public schools. Reading as a pastime should be entirely divorced from reading as a school exercise.

The views here presented may not meet with the approval of more experienced educators, but it is certain that our schools for the deaf could well afford to give more attention to the little ones in this matter. Our institutions stand to the children, during nine months of the year, in the stead of father, mother, home; and it should be our aim, so far as possible, to surround them with the same influences—physical, mental, and moral—that environ hearing children in the best homes. Let us mould while the clay is most plastic to the touch.

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A VISIT TO SWEDEN.

MANY readers of the *Annals* will recall the visit of Mrs. Nordin, of Sweden, to this country a few years ago. While abroad last summer the writer availed himself of an invitation to visit her in Skara, where she has established an institution appropriately named "The School Home for Blind Deaf-Mutes."

Upon my arrival the house was full of guests, the occasion being a public examination or *uppvisning*, at which the leading citizens of Skara and several prominent persons from a distance were present. The exercises consisted of an exhibition of the mode of instruction and of the pupils' handiwork. The latter consisted chiefly of knit and worsted work, and a large portion was sold for the benefit of the children's bank accounts.

The school is pleasantly located in a large building surrounded by a spacious garden, in which the pupils have a safe and suitable place for open-air exercise. At the time of my visit there were seven pupils in attendance, five girls and two boys. Instruction is imparted to them by means of the methods generally used for the blind—raised letters and point writing—with a substitution of the finger-alphabet for speech. Handiwork, such as threading beads, knitting, etc., occupies a large part of the time.

In her report, Mrs. Nordin gives an interesting account of each pupil. The patience required in such work can be appreciated only by those who have had experience in similar work. Besides the double infirmity, some are possessed of other physical and mental defects which render their control and instruction exceedingly difficult. One girl, who had evidently been used to ill treatment before coming to school, was so shy that if one touched her she would at once pull herself together in a frightened way and try to defend herself with both hands and feet. After five months of kind treatment she had got so far that her fear and shyness were overcome; but of course no material progress had been made in her education, nor had any attempt been made to correct her bad habits. Her shyness having been overcome, it was decided to try to reform her, and one day when she had made herself particularly disagreeable she was given a taste of the rod, which had the effect of materially improving her conduct. Moreover, she was not at all

inclined to learn or to do anything. Most of the time she would spend in sitting on her hands, or scraping the paint off the furniture with her finger-nails, and other similar acts not especially commendable. For some time she had been set to moving marbles from one box to another, one at a time. As long as one held her by the arm she would continue the work; but as soon as let go she would at once stop and in a self-satisfied way seat herself on her hands, and all efforts to make her continue the work were futile. Mrs. Nordin was in doubt whether total absence of intelligence or unwillingness was the cause; but she was inclined to believe the latter, so she tried a new method. She gave the girl a large needle and thread in one hand and a large bead in the other, and tried to make her understand that she was to put the needle through the bead; but she immediately threw away both bead and needle, and seated herself on her hands. The process was repeated several times with the same result. Mrs. Nordin again put the needle in her hand, holding the hand so that she could not drop the needle, and put the bead in the other hand, and endeavored to show her what was wanted. To her surprise, yes, to her joy—for the question to be settled was whether the girl lacked willingness or intelligence: if the latter, the case was hopeless; if the former, there must be a remedy—the girl at once dropped the bead, and with the hand that was free she took the needle from the other hand and threw it on the table. Mrs. Nordin was now convinced that it was willingness, not intelligence, that was lacking; that the girl perhaps understood what was wanted, but would not do it. Remembering the wholesome effect of using the rod on a former occasion, she determined to try it again. After a firm chastisement, the bead and needle experiment was again tried, but without success. But when a motion was made toward repeating the punishment she immediately obeyed. When the girl was patted on her back to make clear that she had done what was wanted, she fell about the neck of her teacher and showed neither then nor afterwards any of her former fear or shyness in consequence of the punishment. Since then she has progressed, though slowly.

Mrs. Nordin has another pupil, a bright boy named Johan Nilsson, of whom she is very proud; in fact, she considers him a rival of our own Helen Kellar. He lost sight and hearing at about two years of age, and entered school in May, 1887, at the age of eight. A year later he had learned 135

words, could count to ten, write his own name, and knew all the letters of the alphabet. When efforts were first made to teach him to write he showed no interest, although he was all the time eagerly learning new words by finger-spelling. For three weeks his teacher devoted two hours daily trying to teach him to write, but he showed no interest in it and never made an effort to write a single letter, because the idea of its purpose had not entered his mind. But one day as she formed the letters of his name on her fingers one by one, and at the same time wrote each one in raised characters, the idea of some connection between them dawned upon his mind, and from that day he eagerly and readily learned to write. He is, however, sickly, and in his eagerness to learn they have to restrain him lest he should overtax himself. At the time of my visit, when he had been in school three years, I could converse readily with him by means of the finger-alphabet, and he could express himself freely in good Swedish on almost any subject within his knowledge. He knows very well where his things are about the room and in the bureau. He had a curious record of the time till he was going home. Having asked some time before how soon he was going home, he was told, "In thirty or forty days." From that time he kept a careful record of the time, always with a distinction of ten days. When I was there he gave the time for going home as seven or seventeen days, next day six or sixteen, and so on. It was thought best not to undeceive him till the end of the shorter term. Mrs. Nordin has also made some efforts to teach him to speak, with encouraging results.

According to official statistics for 1885 there were then in Sweden more than sixty persons blind as well as deaf and dumb, of whom twelve were of school age. The school is supported mainly by the general government, but parents or the provinces pay a certain *per capita* for each pupil.

In Skara there is also a School for the Deaf, in charge of Mr. Nordin, husband of Mrs. Nordin. It is composed chiefly of pupils from all parts of the country who have not entered school till an advanced age, and whom it is therefore thought best to instruct by themselves apart from the younger and brighter pupils in the ordinary schools. The sign-language is chiefly used, and, notwithstanding their advanced age, the pupils seemed to be acquiring a fair education. The boys attend a public gymnasium in the city, which is in charge of a military officer.

Before I bade good-bye to my hosts, Mrs. Nordin expressed in cordial terms the pleasant memories she entertained of her visit to this country. The facilities for study and the assistance rendered her, together with the generous hospitality with which she was received, gave her a very favorable opinion of America and the Americans.

In Lund another school was visited which is conducted on the combined system. One of the boys was remarkably apt at lip-reading, but as a whole the orally taught pupils seemed less proficient in this respect than those I have seen in pure oral schools. The members of the graduating class were to be confirmed on the day of my visit, and a large number of former pupils were in attendance, for it is the practice of the Swedish schools to allow them a sort of reunion every year, when those desiring it may partake of the holy communion.

In the Lund School an apparatus came to my notice which deserves special mention. It is an apparatus for teaching fractions, and is in fact the same instrument in a simple form as the "Fraction Teacher," independently invented and patented by Mr. Denison. Remembering how our teacher used to waste a box of crayons and a couple of apples (to the latter we had no objection, however) in trying to make the class comprehend that $\frac{1}{4}$ was less than $\frac{1}{3}$, the value of this instrument immediately struck me. In its simpler form the instrument consists merely of the frame and blocks and wires, without any scales, plumb-lines, etc. While the value of these improvements is undeniable, it may be questioned whether it is not outweighed by the increased cost, which will place it beyond the reach of schools of small means. Possibly Mr. Denison may have the instrument manufactured in its simpler form also for the accommodation of smaller purses, for to me it seems that for giving an idea of the nature of fractions the simple instrument is quite as effective as the improved one. Moreover, being simple and cheap, the pupils might be allowed to use it freely, as it is not liable to get out of order, and where a school can afford only one of the improved instruments, it might also afford one of the simple kind for every class-room.

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THE first arrival in the colored department last autumn was bright semi-deaf mulatto boy, about ten years old, who, in answer to my vociferous request for his name, responded shyly and in a musical voice, "Name Pick." Pick had been under instruction for some time before Benson matriculated, and his ill-concealed mirth at Benson's efforts at dactylology was instrumental in arousing a wholesome antipathy on the part of the late arrival, which sentiment was heartily reciprocated by Pick. As time passed on and the school increased in size, it was frequently necessary for me to be absent from the school-room of the colored children during that portion of the session that I usually devote to recitations in that department. At first, during these absences, I placed Pick in charge of the beginners, with hasty instructions as to the kind of questions or directions he was to employ. But I would almost invariably find a general stagnation of business on my return. The young instructor, with an aggrieved expression of countenance, would inform me that Benson utterly declined to participate in the symposium. On other occasions, I would find this direction on the slate: "Henry, strike Benson with the cane," and Benson with fire in his eye prepared for whatever might transpire. In view of these little pleasantries, it became necessary to declare the post of tutor vacant during my absences, and eventually the experiment was made of employing a negro teacher from the public schools. Benson's face was a study when I presented his new instructor to him and informed him that hereafter he would recite his lessons to her. He evidently had profound convictions on the subject of any female mind attempting to meet his case. However, he made no objections, but he did not conceal his elation when, after a brief season, the experiment was found to be unsatisfactory to others besides himself.

In the last article, it was stated that the form of sentence decided on for Benson's first efforts was, "The hat is on the desk." I am still of the opinion that this is a good form of sentence for beginners—for *some* beginners, that is; but I am quite as strongly of the opinion that no special form is equally well adapted to *all* beginners. There is no rule without an

* See the *Annals* for January, pp. 44-47.

exception—especially wherever Benson happens to be concerned. As an exception, Benson has no superiors and but few equals. The hat and the desk were soon within his grasp. (When I say *soon*, I mean relatively, of course.) He also regarded “on” with some favor, but the verb and the articles he evidently considered as merely ornamental features, in no way essential to the sentence. Sometimes he would put them in, but more frequently they were conspicuous by their absence, and he never (or at any rate not for a long time) got them in in their conventional sequence. I soon decided to try the verb “put,” and it was a change that fortunately met with approval at the hands of the one most concerned. Benson, however, has always shown himself somewhat averse to the process that Uncle Remus designates “wuckin’ he min’.” He resents the introduction of new material if it involves, or tends to involve, intense and protracted cerebration. He prefers to employ those words and sentences that necessitate the least amount of reflection. When I considered it safe to do so, I submitted the first personal pronoun to his consideration and told him that hereafter he might use it in place of his name. As a labor-saving scheme this at once commended itself to him, and he adopted it without delay. He even improved upon my suggestion, and substituted it for other proper names, more particularly my own, which was for a long time a source of much bother to him. On the other hand, when he had used the verb “put” for some time and I ventured to introduce the verb “touch,” Benson would none of it; “put” was good enough for him, and he was not going to adopt any new-fangled flourishes because, forsooth, Pick and a few others of the small fry appeared to approve of the interloper. “Put” had answered every requirement so far, and for his part he proposed to stand firm against all innovations.

It is impossible to watch Benson’s mobile features and elaborate gesticulation without involuntarily converting his pantomime into English. I may not always translate accurately, but I feel that I cannot be far off. A legislator of the Golden State once remarked that a certain lady associated with the California Institution bore “the stamp of intellect in every *liniment* of her countenance.” Benson’s “liniments” are a feature that should not pass unnoticed. I do not mean that they are specially expressive of intellect, but they so aptly and graphically herald the transit of whatever may be passing through that

section where psychologists assume that the mind is located. If it were but possible to secure an instantaneous photograph of such a non-actinic subject, a rare collection might be made of Benson's "phases." (Pardon the pun—I can only plead in extenuation that it is not original.) Labial gesticulation is one of his specialties. Teachers of the deaf do not need to be told that the sign-language is sometimes accompanied with more or less distortion of the face, but I certainly never gazed on such a shifting panorama as Benson's mouth presents during one of his classic renditions. Possibly, his versatility in this direction may be due to the fact that his facilities are so ample. One day, while describing how an acquaintance cut his foot with an ax, Benson pronounced the word "chop" quite visibly, so that a very ordinary lip-reader could not have failed to catch it. Students who incline to the onomatopoetic theory of speech may find food for reflection in this incident.

One of the first impressions that a person receives of Benson is that he is very large, even for his size, if the Hibernicism may be permitted. He requires considerable space as he moves about, and Sèvres vases would be utterly and irretrievably out of place in his vicinity. I carried a jug into the school-room among other objects, whose names include all the letters of the alphabet. I think this piece of pottery survived two days; then it became necessary for me to build it up each day for fear the pupils might gradually forget the original shape of the article, and conclude that the term "jug" simply meant broken pieces of crockery. Benson was pretty certain to wreck this structure whenever he came within range of it; the eraser might be three feet away on the other end of the table, but in reaching for it he would include the jug with the same elephantine grace that characterizes his every movement.

At the same time he affects an intense dignity which is in perfect keeping with his anatomical structure, but which is preserved at times with much effort. But a day or two ago I had called up before the class one of Benson's *confrères* (a diminutive specimen of ebonized humanity) and told him to run around a chair. Misunderstanding my direction, he stepped briskly forward and began to execute a double-shuffle with great energy. Benson's dignity was not proof against this spectacle, and for a few seconds he was utterly unable to restrain his emotions. Even after he had regained measurable control of his risibles I could for some moments detect at

intervals a smothered outburst of laughter, followed immediately by a preternaturally solemn expression of visage and a most abnormal interest in his lesson.

This recalls an incident that occurred soon after he came here. I one evening told the colored children a story in signs. It was evidently a new experience to Benson, and he made no attempt to disguise his interest. I think he was the most appreciative auditor (or observer) that I ever had. The most of the other pupils were disposed to regard the performance as a "chestnut," but I played to him alone, and ignored their gentle intimations that they had heard that story before. It was the time-honored narrative of "The Fisherman" that was told. For the time being my auditor laid aside his dignity and put no check on his mirth. At certain points, where he feared that the delicate humor of the situation might escape his classmates, he prodded up those nearest to him with his forefinger or his elbow, much to their disgust, and then abandoned himself once more to roars of laughter.

One evening after supper I thought I detected a kind of plaintive murmur, as of some one in distress, over in the colored building. I went over and entered the study-room, where Benson sat alone, deeply absorbed in a book. I still heard the sound, and passed on through into the school-room for the blind. There was nobody there, and just then the sound stopped. Subsequent inquiry developed the fact that it was the voice of Benson that I had heard. It seems that he is in the habit of getting a book and reading to himself, under the impression that he is improving his mind. Nobody would ever think of associating such a weak and quavering voice with a being of Benson's physique, and it is not strange that it misled me.

The boy who told me that it was Benson I had heard is a youth nearly grown, who has been in school for several years. He acted as Benson's interpreter for some time; indeed, it is frequently necessary for me to appeal to him now for an explanation of some of Benson's signs. He touches or pats the back of his hand to indicate a black man, the palm for a mulatto, and his collar or a piece of paper or any convenient article of a white color for a white man. For a locomotive or the railroad, he reaches up and pulls an imaginary bell-rope or whistle. Sometimes his signs are too much even for his interpreter.

It should be noted that Benson's bump of locality does not seem to be any better developed than it is in some of the rest of us (who are disposed to think that in our cases instinct has been "evoluted" out to make room for reason). Benson insists that his home is southeast of here. Some turn in the railroad on his way to the school has thrown him out of his bearings, and no amount of explanation can straighten him out; he continues to assert that his home is in a locality which, as a matter of fact, is pretty effectually pre-empted by the Atlantic ocean.

It has been necessary at times to reprove Benson. On one occasion it was reported that he had made dire threats of using a pocket-knife on one of the attendants who had unwittingly excited his wrath. When he was approached on this subject, Benson at once began to generalize: "Yes, no doubt this is a very crooked world. Now, there was Pick, for instance; I might not regard Pick as a dangerous character, but it wouldn't always do to trust too implicitly to appearances. No longer ago than yesterday—stay, was it yesterday? Yes, it was only yesterday, Pick and—who was his fellow-conspirator?" And so he would wander on, while Pick sat ready to enter a vigorous denial, general and particular, to everything that might be charged. No words can portray the appearance of the prosecuting attorney at such times; the tragic levelling of his massive forefinger, the warning glance out of the corner of the eye, the great care in locating and specifying minor and immaterial details, the utter absence of anything definite, and the manifest purpose to divert attention from his own peccadilloes, constitute a comedy from real life that generally gains for him the object he has in view, and with many warnings to the indignant Pick to be more careful of his deportment next time, the virtuous Benson resumes his labors at his slate, in the serene consciousness of having done his duty.

Benson's conceit is almost as profound as his stupidity. When I write a question for him, it is of course important that the letters be constructed with great care, and hence it is sometimes necessary for me to revise what I have written. He never realizes for a moment the true reason for this; not he. Apparently he infers that I am only endeavoring to make my work more presentable to his critical gaze, and he steps forward with a wave of his hand, as of one who would say, "Oh, of course, the best of us will make these little blunders at times; but never mind, I will make all due allowance."

Just back of him sits the interpreter, and Benson often appropriates the remarks which I am addressing to his neighbor, and he does it with a complacency that extorts my admiration. The subject under discussion may be the tariff or the battle of Bunker Hill, or some other topic equally and hopelessly remote from Benson's powers of comprehension, but presently I become conscious that the interpreter has been eclipsed, and lo! the amiable visage of Benson affably bobbing assent to my various propositions.

He is not so alert when I wish to call his attention to some error he has made on the black-board. With one arm jauntily akimbo, and the other resting easily on the desk, he will regard my remarks with the indifference of a casual spectator. It is necessary to particularize with great care in order to satisfy him that I am addressing him. Even then I sometimes fail of making the desired impression of the gravity of his error. Only a few days ago, provoked out of all patience at some unique but unsatisfactory arrangement of his articles and verbs, I began hurriedly to recapitulate the instructions so often given before, and with considerable animation reproached him for not paying better attention to them. In the midst of my harangue, however, I became convinced that my train of thought and flow of language had been too expeditious for him to keep up with, and that the only impression on his mind was that of an individual with flying coat-tails and arms going like a wind-mill, and the episode of the double-shuffle was in imminent danger of repetition. I closed in time to prevent any lapse of Benson's dignity, but too late, I fear, to save my own.

It was my purpose in writing these articles so to present the difficulties met with and the manner in which they were met that the description might be of practical benefit to others engaged for the first time in primary work. I fear that I have wandered somewhat out of my course, but this much can be said in my defence: the more I have to do with beginners, the more am I convinced of the impossibility of providing any method that shall be adequate to the needs of every case. There must be almost as many methods as there are pupils. Reference was made to the ease with which Benson learned to copy any word that he could see. I have since that time had a bright-looking pupil come in who seemed *for weeks* utterly unable to copy a single word legibly, yet when she once got started she speedily left Benson far in the rear. Keeping in

haps, worth mention. I have learned, as has been intimated above, that no text-book has been written, nor is it possible to write one, that can compare with daily manuscript lessons prepared by the teacher. I am aware that I am not the first person to advance this thought, but it cannot be too strongly insisted upon. That teacher who supposes that the printed lessons of a primer are superior to his own makes a grave error; and if he is influenced by the fact that the preparation of lessons, daily, is too much trouble, his neglect is criminal.

I have been impressed with other thoughts of which it is not so easy to speak. As I have guided my pupil, anticipated his difficulties, marked his subterfuges (transparent as water to me), and sighed over his blunders, there has come to me the thought of the Infinite Intellect, the

divinity that shapes our ends,
Rough-hew them how we will.

Does it seem presumptuous to make this comparison? Nevertheless it is one that I believe has strengthened my convictions of the Divine Wisdom, and that I know has not lessened the sense of responsibility that attaches in a peculiar degree to the position of teacher of the deaf.

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THE ART OF QUESTIONING.

It might not be inappropriate to open a paper on questioning by a question: "Why do we question in a school-room?"

There are two reasons.

First. As a test.

Second. As a means of development.

That a pupil has committed a lesson and can repeat the same by heart is no proof that he understands it. If the teacher would know that the pupil does understand it he must question him.

The art of questioning—and one might add to that the science, for the principles that underlie and govern the art of questioning have developed like all science experimentally, and can like all science be formulated in law—the science of questioning should be carefully considered by every teacher, for ac-

according to the skill with which he is able to draw out his pupils, in just that degree will he be successful in building up.

First. The test question should cover all the ground as far as time will permit, the teacher being careful to select the things of importance in the lesson. We are likely to overlook some point that seems so clear that it needs no question.

Here is an illustration from a history lesson :

“ Mark Antony had the body of Cæsar carried to the market-place.”

Question. “ What was done with the body of Cæsar ? ”

Answer. “ Mark Antony had carried it to the market-place.”

An entire misconception.

Second. The aim of the lesson must be made prominent. Every lesson should have some particular aim, falling into proper sequence. Now, as the pupil has not arrived at the difficult attainment of generalization, the teacher will have to do it for him. Often a few judicious questions will make the application clear, and the subject-matter takes its proper place in the mind of the pupil in relation to his other knowledge. And it is just this relation that is very important for him to get, so that a week's, a month's, or a term's work may form for him a complete harmonious whole, that can be used easily and with facility at any time.

We all know what a large part the association of ideas plays in our own attainments, and the child has not yet learned, and may never learn, that there is an interdependence of one idea upon another. The teacher must help him here. He must make plain to him how he can associate ideas so that they will follow link upon link in his mind. He must see the *How* and the *What for*.

More often we find that pupils have knowledge, but lack entirely the ability to make useful application of it. Their knowledge is disjointed and fragmentary—the sequence has not been observed.

Third. The questions should be graded ; that is, there should be some question or questions suited to the various ability of the class. Since no class can be so perfectly graded that all the working and assimilating power in it is the same, unless the difficulty is met in some way, injustice will be done unintentionally to some member of the class. For this reason there should always be some question that will try the highest powers of the best, and one or more, but certainly one, that can be

readily and correctly answered by the weakest one. Then, too, when your method of questioning comes within the comprehension of the slow pupil and he knows you habitually wait for or at least expect answers from him, he is apt to make more exertion to meet your demand than if he knows that you tacitly admit his incompetence. Often have I seen the look of satisfaction come into a pupil's face when he at last came to the answer that had no correction. It gives him courage to go on with the corrections of the next.

Much depends on the form of the question. The form that admits of a simple *Yes* or *No* for an answer should be sparingly used, but should by no means be entirely omitted.

In a written set of questions care must be taken that the succeeding question does not contain the answer to the preceding.

Then there is that great class of questions that require the pupil to make a deduction for himself, being perhaps the hardest of all questions. All students have a horror of the questions that are called the *Dis-cusses*, and surely of all questions they most try the powers of the student. He is then required to talk on a subject, to say what he has to say clearly and concisely, to show deep and original thought, and in some cases to talk exhaustively. All his powers are tried; memory, reason, judgment.

"Heaven is not reached by a single bound," and so I think it well to begin early in the school-life by letting a child tell you all he can about a certain subject. After a few years of constant and patient work in this line, very gratifying results can be reached. History and geography are especially good studies in which to follow this method.

In this same line are suggested the lists of questions that have the answers given either by the book or the teacher. I find that the fewer of these I use the better for my class. That kind of work too readily becomes rote work and is no stimulus to the pupil, and often dire confusion is the result when the exact words of the questions have been forgotten and the wrong answer is written.

To ask questions as a means of developing knowledge is a very difficult thing to do, and unless pupils have been taught in this manner by easy beginnings nothing will be accomplished. So many things are required of the pupil here, and the teacher must work skilfully to hold the attention and keep the mind

concentrated, so that no link in the precious chain is broken ; the pupil must have a trained memory, so that at any time he can go back to the very first step and draw a comparison between it and the last one, and he must have reason and judgment to make the right deduction when the last step is reached. By carefully observing the sequence and going always from the known to the unknown, by patience and repeated trials, the desired result can be obtained. This method is as old as Socrates himself, but no improvement upon it has as yet appeared, and in the teaching of all the natural sciences it is the ideal method for developing quick perception and the power of classification.

All children like to ask questions, not only those to which they know not the answer, but also those which they themselves can easily answer. Then, too, the ability to question correctly requires a perfect understanding of the subject. With these points in view I often ask different ones in the class to write the questions on a certain lesson. The opportunity afforded to the teacher by such an exercise is very great indeed. All the class is on the alert, and seems to have a keen enjoyment in answering the questions one of their own number has written.

Here is a set of questions asked by one of the members of the physiology class :

1. With what part of the body do we think ?
2. Do we think with the whole head ?
3. For what are some of the other parts of the head used ?
4. What is the name of the organ which fills the hollow place inside of the skull ?
5. Why is the brain one of the most important organs of the body ?
6. Can any one of you examine your own brain ?
7. Does the brain of animals look like our brain ?
8. How many brains has each person ? Name them.
9. Where is the large brain and where the small brain ?
10. What color is the brain outside ? Inside ?
11. Why is it placed carefully in a strong bony box ?
12. What can you see in the illustration of the brain cells ?

This method may be made especially useful in teaching arithmetic.

Take an example like the following :

$$(12 \div 3) \times 7 ; \text{ or}$$

$$(\frac{1}{3} \text{ of } 36) \times 15,$$

and ask the pupils to put them into problems. It will be proof that they understand the problem written.

Here are some problems as written by pupils :

John bought marbles for his 12 cents, at 3 cents each. How many marbles did he get ?

James has 7 times as many marbles as John. How many has James ?

Bertie has 3 times as much money as Henry. Bertie has 36 cents. How much money has Henry ? Henry's father has 15 times as much as Henry. How much has his father ?

If three yards of calico cost 36 cents, what will 15 yards cost ?

It is a good plan to incorporate into the questions of to-day any question that seemed especially difficult yesterday.

Many prominent educators go to great lengths in the matter of review questions, and maintain that a class should be in a constant state of review by incorporating every day a sufficient number of review questions.

Teachers who follow this plan will testify how much easier such a class takes an examination, and how little—really none at all—cramming has to be done in the last week.

A teacher in his class-room should always appear calm. If a pupil seems to hesitate and the answer does not come as quickly as it seems to the teacher it should, no display of dissatisfaction or irritation will bring it any quicker. The teacher should be cheerful, and seek to inspire his pupils with a desire to put forth their best efforts. Children have not yet learned self-control and are easily confused ; the teacher's manner, therefore, at all times, should be calm and deliberate.

Teachers often expect too much, and call a pupil to account for something told him last week, or even longer ago than that. It has slipped from the little brain. But the patient teacher will tell it over and over again, questioning carefully to see that it is all clear.

Always bear in mind that questioning has a value for you and also for your pupil ; that it draws out information, but that it may also give information ; and that a lack of ability to express clearly any knowledge the pupil is supposed to have needs careful investigation by the teacher to ascertain if the matter has been presented in such a manner as to be plain to the pupil.

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THE EARLY STAGES IN THE EDUCATION OF THE DEAF.

It has, for several years, been my good fortune to teach young children, and this has afforded me an opportunity to study different methods of teaching.

The object of this paper is to state and explain the method which I have been led to prefer as productive of the best results.

I observe the following general rules:

1. Natural signs and illustrations are employed as a medium of instruction for beginners.

2. The memory is cultivated, for the first few weeks, by writing and copying words and sentences.

3. The pupils should be taught to read writing first, and afterwards finger-spelling and printed matter.

4. They should be led to think for themselves throughout the whole course of instruction.

5. Clearness in presenting subjects and thoroughness in imparting knowledge on the part of the teacher are the secret of success.

“The child educates himself. The teacher superintends and directs the process.” This is as true of the deaf as of the hearing. The deaf are, to a great extent, thrown upon themselves for all they obtain. But when it comes to teaching, we should begin in a way as nearly as possible like that in which hearing children acquire their mother tongue.

A good many children, when they first come to school, cannot write even the letter *a* for a day or two, not because they are incapable, but because their mental faculties are undeveloped and they have not been trained to write. To give them a little amusement and practice, I would write the capital letter *A*, to be copied by them before they learn the rest of the alphabet.

I first teach two or three letters; for instance, I take the letters *a*, *b*, *c*, but do not complete the alphabet, and my only object is to train the children to write.

As soon as they have learned a small number of words sufficient for the purpose, I proceed to use these words as combined in short sentences.

On my desk are cards having pictures of objects represented by words that have been taught. I allow the pupils to search

among these cards for the one represented by the name written on the black-board. Then, again, I hang up a card with the name of the picture written upon the object. The card goes to the pupil who writes the word best. This stimulates all the pupils to a little rivalry, and serves to vary the exercises. Indeed, we may consider this to be the first step in reading.

After the class begin to write sentences I seldom give them new words. I leave it entirely to them to obtain additional words in the following manner: I furnish each scholar with Miss Fuller's "Illustrated Primer." Every morning the class is allowed fifteen minutes or more to look at pictures and study the names—one at a time. When they go to the black-board to write the name of the object studied, they are not allowed to look into the book while so doing. I do not go on any faster than the pupils acquire a thorough knowledge of what they are studying. When they have learned the names of things, say on three pages, the lesson should be reviewed every few days:

The work is slow at first, but after reviewing the book several times the pupils become able to write a long list of words by simply looking at the pictures. In this way a large vocabulary is acquired with very little effort on the part of the scholars. By this means the teacher is enabled to give more time to those pupils who are less apt to remember the words studied.

The teacher should see that the letters are correctly formed and the words spelled right. For drill in sentences, words should be taken from the list with which the pupils are familiar. This method also gives practice in penmanship.

At the same time I teach the use of the verb. I take the verb *ran*. I run around the room, stop, and write on the black-board, "I ran." The pupils are told to copy the sentence. I repeat the use of the verb until I feel sure that each child knows what it means. In this way I introduce other things. For instance, I teach each pupil his or her name by writing it on the black-board. In a few days the pupils will become familiar with the names of their class-mates simply by connecting their names with the verbs *ran*, *walked*, *sat*, *stood*, etc. *Frank Brown* is written over his black-board and then I write, "Frank ran." I keep up the use of the verb until the name of each pupil is associated with the verb itself, and until the class un-

derstands the use of "I," "you," etc. As the class progresses, other verbs are employed.

If the individual members of the class do not use "I," "you," and "William" right, keep at the work until all the pupils can do so. Repetition is the essence of success. The same lesson should be reviewed until every letter and sentence has been made perfectly familiar, and has become the child's own.

Before school closes for the day, I write three or four sentences on the small slate of each pupil. These sentences are to be copied until the slate is full. At first the sentences should be as short as they can be made.

The first few weeks the pupils are permitted to copy the lessons from their slates on the black-board. This practice, however, is gradually discontinued. Afterwards they are required to write them from memory. Merit marks are given to those who learn the greatest number of sentences. Sometimes, out of four sentences, a child will remember but one; others will learn all. The merit mark stimulates study, and the pupils will strive to outdo each other.

I employ the past tense with beginners, and experience has demonstrated that better results can be obtained than by using the present.

1. The advantage of the past tense is that it has the same form for all numbers and persons.

2. It requires less time to learn the use of a verb in a simple form, and less effort to remember it.

3. It avoids confusion. It gives confidence on the part of the pupil, and fewer errors are made.

4. It also gives more time to devote to practice on the numerals, pronouns, and the like.

5. Children make greater progress by the use of the past tense the first year. The more knowledge the child obtains, the easier it is for him to understand the mysteries of grammar. With those children who are slow to acquire knowledge, the past tense is especially desirable. *Is, want, like, love, and have* are all the present-tense verbs that first-year pupils require to express themselves in every-day conversation.

To illustrate my method of teaching sentences I give a few examples. For a single lesson I write: I ran, Lena ran, You ran. I follow this up with You walked, I walked, Lena walked; third, I give the sentences: I walked, Lena ran, You walked, A dog ran, and each day vary the sentence and verb. The

teacher should be careful about introducing transitive verbs too early, lest the pupils might become confused. At first would be best to give without objects a few such verbs as *struck, kicked, bit, read*, etc.

It is well known that it requires some time for beginners get the order of the verb, subject, and object in a sentence. would not be in a hurry, but would write on paper or the blackboard, to be read and copied, such examples as—

John struck the book.
Lena struck the book.
Iva struck the book.
I struck the book.
You struck the book.
John struck the fan.

Lena struck the fan.
Iva struck the fan.
John struck the chair.
Lena struck the slate.
I struck the hat,
etc., etc.

These should be taken, one at a time, for reading and copying.

The advantage of this is to train the eye to gather thought by reading and to learn the order of words in the sentence.

There are similar exercises with the intransitive verb and preposition; for example:

I sat on the chair.
John sat on the chair.
Henry sat on the chair.
I sat on the desk.
Mary sat on the desk.

Lucy sat on the desk.
William sat on the chair.
Thomas sat on the floor.
Frank sat on the table,
etc., etc.

The verbs and phrases given in reading exercises should frequently be introduced into lessons for the evening.

I have at hand, on my desk, a large drawing-book. In this book are pictures representing animals in all states of action. Some are at rest, some are in the act of running, others in the act of kicking, jumping, eating, etc.

On the first page of this book are various animals and persons illustrating the verb *ran*. I first write the verb *ran* and act it out by running around the room. I then open the book, and a slip of paper on which is written "A cat ran" is placed right beneath the picture representing the action thus expressed. The next is, "A cow ran:" the next, "A man ran." These sentences are copied by the class until they are able to write what the picture represents without any other help than the picture itself.

This is really the second step in reading, for the child learns to read the sentence expressing the action shown in the picture.

Every page illustrates a different verb, with pictures to suit

the action as varied in different cases. On the second page of *my* book the verb *walked* is illustrated by no less than eight different subjects. On the following pages we find the verbs *sat, stood, jumped, slept, struck, kicked, read, etc.*

Children will understand the meaning of the verb from the *action* shown in the picture.

Some of the illustrations are capable of expansion into *three* or more sentences, forming a short story. Take, for an *example*, a man sitting in a chair asleep. The pupil can write :
“*A man sat on a chair. He read a book. He slept.*”

Or this :

“*A girl dropped a doll. She broke the doll. She cried.*”

This is the first step in learning to write short stories.

In this connection I would suggest that the teacher be always *on* the alert for new pictures presenting new ideas. The value *of* such a set of pictures cannot be overestimated. They *convey* to the mind the *exact action* meant. As the pupils advance, *sets* of pictures containing complete stories without words may *be* given them to be turned into English. Such pictures can *now* be obtained from many of the humorous papers, such as *Life, Puck, and Judge*, and the first-class dailies of our large cities.

Before me is a set of five illustrations, published in *Life*, vol. xvi, No. 414, entitled, “Where the Ostrich made a *Mis- take.*” There is no explanatory text with the pictures.

I gave this set to a class of pupils who were in the second *year* of their school life. I explained to them the meaning *of* the following words, which were new to them: *Ostrich, ostrich's egg, negro, sucked, naked, lips, thick, and pointed.* The following is an exact copy of the interpretation of the *pic- tures* given by a nine-year-old girl, who had been in school a *year* and a half. It is reproduced without any corrections or *changes.*

The negro and ostrich.

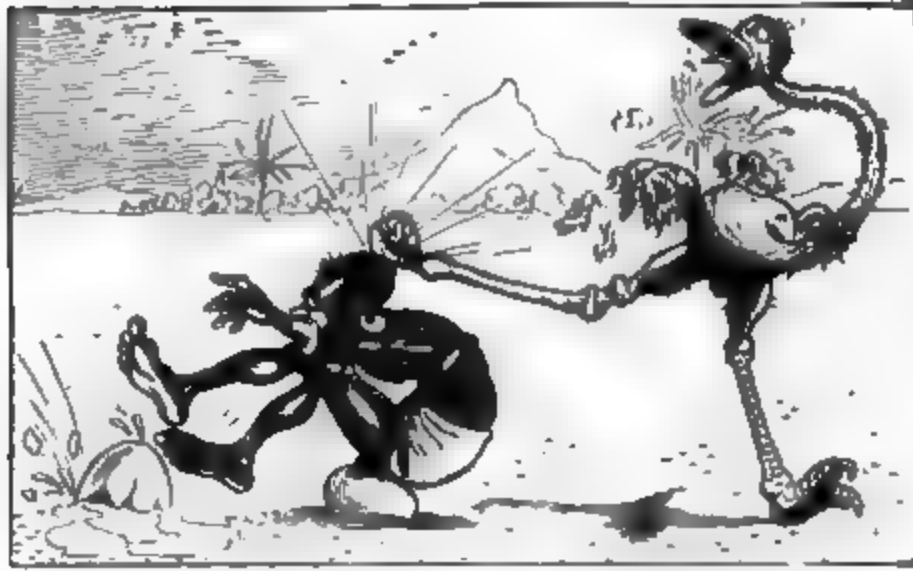
A negro sat on an egg. He had no clothes. He was naked. He had large ears-rings. He had thick lips. He had curly hair. An ostrich was on the ground and near the negro. It was large.



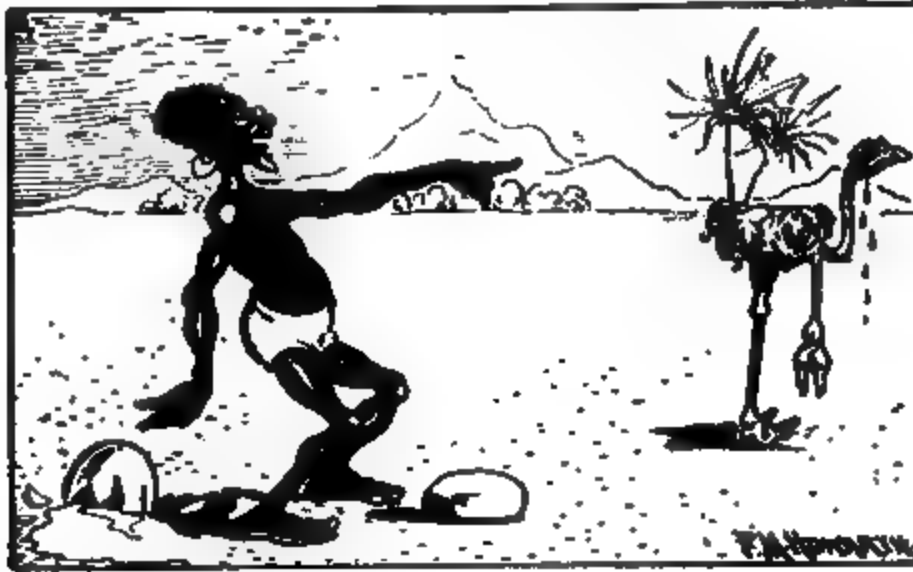
An ostrich walked to the negro. It saw it's egg. The negro stole ostrich's egg. He sucked the egg. The ostrich looked over the negro's head. It was angry.



The negro took the egg off from the ground. He held it.



The ostrich struck the negro's head. It cried for it's leg was broke. The negro kicked the ostrich's egg. The ostrich's egg spilled.



The negro pointed at the ostrich. He laughed at it. The ostrich cried and walked away. It was lame. The negro lost eat the egg. He did not want it.

For the purpose of teaching the use of adjectives, colored lithographic cards are of great value, by reason of the various colors introduced. Take, for instance, the subject of "Little Lord Fauntleroy and his Dog," which is illustrated by a highly-colored lithograph. In the picture we have the qualities to be expressed by the adjectives large, small, pretty, yellow, black, etc.

Nothing better for the aid of the pupil and teacher can be found anywhere. It will not take a child long to see the distinguishing qualities, even if he does not know how to employ the words denoting them.

In accordance with the suggestion of Mr. James Denison, Principal of the Kendall School, I use toys a good deal with

young classes. Toys are of incalculable value as object lessons; they are the means of arousing interest and enthusiasm. Children will learn a great many sentences by means of only one toy. For example: I have a rubber doll with legs and arms that can be moved every way. I bend the legs and set it upright on the desk. The pupils write, "The doll sat on the desk." Then I put it into a box and the sentence is written, "The doll sat in the box." Again the pupils look under the desk and write, "The doll sat under the desk." I stretch out the arms, and make the doll creep, and give the sentence, "The doll crept."

In my closet are over fifty toys, which can be utilized in an almost endless variety of ways with unabated interest to the children. Some are mechanical, such as a locomotive, a walking horse, a running rat, a crawling alligator, etc., and they afford a fine opportunity to practice with the prepositions *to*, *into*, *from*, *out of*, *around*, etc.

There is a bowl of water in which toy fishes, eels, crabs, turtles, or ducks can be placed, and made to swim by applying a magnet to the small piece of iron in the mouth.

A little girl wrote the following from actions with toys:

A doll rode in the cart.	A cross dog bit a fish and ate it.
It wore a pretty blue dress.	A rat sat under the cross dog.
It drove two oxen.	It looked at the dog's leg.
Two oxen drew the cart.	

The use of the imperative mood assists greatly in developing intelligence in children. I have found it advisable to employ this mood after the pupils have become familiar with a sufficient number of verbs and phrases.

After the action has been performed, the pupils describe what has been done. I write on paper several commands, and give them to a pupil. He calls up another pupil and spells out on his fingers the commands, one at a time. He will have to read the orders carefully and understand them, so as to escape the mortification of being corrected by the class. It is his part to see that the orders are all executed, and to make corrections if necessary.

For example, John spells to Mary:

Go to the window.
Open the window.
Throw a crayon out of the window.

The class translate these into the following :

Mary went to the window.

She opened the window.

She threw a crayon out of the window.

A text-book should not be introduced into the school-room the first year. The teacher himself is the only book the child needs, and certainly, if the teacher is at all competent, he will need no other aid than a few picture-cards for illustration. The teacher (of the deaf) is looked up to by the pupil as a being infinitely wise. The confidence of the child once gained is held to the end, especially if all that the teacher says is true. Never be false with a child. He imitates the ways and actions of the master.

The mind of the deaf child is entrusted to the teacher to be trained, developed, and cultivated. Too much stress cannot be laid upon this point. The first thing the teacher has to do is to study the different minds that he may know just how to act upon them. There are some children who need more care and attention than others in order to bring forth good fruit. Where the soil is poor, more work is required to produce a crop than where the soil is rich. The perceptive faculties are sharper in some children than in others.

It is a great advantage for both the teacher and pupils that the habit of observation be cultivated early. We all know that parents take their children to walk for the purpose of seeing something new. Nine months out of every year, the best of childhood life, the teacher of the deaf is a parent to the children under his charge. Whatever will tend to make the future lives of these children bright and pleasant should be studied. The teacher, if he has his heart and soul in his work, will endeavor to do for the child that which will serve to brighten his future life. One of these things is to cultivate the habit of observation. The teacher might take his class out for walks in the country, and there show the children the different wild flowers and where they grow. The untrained eye would not be likely to discover that beautiful spring flower, the trailing arbutus. If, perchance, the season is at hand for the arbutus, would it not be a good idea to search for it? When a specimen has been found the class should be called together and shown the characteristics of the plant and flower, *i. e.*, that the plant is a creeper, that the leaves are thick, and that the flower is often hidden from view by the

leaves. We should, then, first search for the plant, afterwards for the flower. In this way much information will be obtained from nature and treasured up for future use. Other means of cultivating the habit of observation will readily occur to the competent instructor.

A few hints will not be out of place here about encouraging children to read.

The first thing the teacher must do is to avoid wearying the child with long and hard lessons; these should be a little below what he can do at his best, and be prepared rather for reading in the evening than for memorizing.

The teacher should vary reading exercises as much as possible. I write on the black-board a short journal or story, and tell the children to copy it on their small slates; the children read it, and then I give out questions in relation to it. It would be well to give the children the same journal or story for study in the evening.

In the *Raindrop* I mark out, with red pencil, short stories as far as page 120. In the morning, I select one or more stories for reading. Every time the pupils go over the same story they understand it better than before. They thus unconsciously become able to remember many expressions, and even to write out a story after reading it a few minutes, using a good deal of the language in it with correctness.

In teaching questions the first year, I use the *present* tense: that is, when they understand how to apply to their proper uses different adjectives and prepositions, and a few present-tense verbs such as have been taught. I take, for example, "John is sick," and change the sentence into the question form: "Is John sick?" "Is John well?" The sentence, "A book is on the table," is written, and I ask several questions: "Is the book on the floor?" "Is the book on the table?" "Where is the book?" "What is on the table?"

I also teach such questions as, "What is your name?" "Where do you live?" "How old are you?" "Do you like school?" "Do you want some water?" etc.

The second year the pupils will understand questions in the past form more easily, introducing the different forms of questions one at a time.

Reading should form the basis of all school work. The deaf child who has been in school two, three, and four years does not care much to trouble himself with books outside of

school hours. Where there is one young person that devotes a great deal of time to reading and study, there are ninety-nine who will give the same amount of time to play and recreation. If the teacher attempts to *compel* a child to read outside of the school-room he does that child a wrong, and the result is a dislike for books. Reading is a matter to be left to every person's taste and inclination.

The great fault in the education of the youth of to-day is that too much is crowded into a short space of time. You cannot grow corn planted on a rock. Neither can you make children retain what you teach if it does not take root, or become part of their being. The law of growth is immutable, and applies to everything animate and inanimate; it is one to which God himself conforms in all his dispensations.

Reading is the means by which the mind of the deaf child is to be emancipated from ignorance, and it is to cultivate a taste for reading that every teacher should give special effort. As children differ among themselves in taste, inclination, and capacity, the duty of the teacher should be to study the individual characteristics of his pupils, and furnish each with such literature as is best suited to his age and his stage of advancement.

There should be exercises in reading in the school-room. The first and cardinal thing to cultivate in the child is *attention*. From attention grows interest. *Memory* is the next important faculty to improve. This can be done only by frequent repetitions and reviewings, so as to fix the ideas and thoughts and language permanently in the mind.

It is simply ridiculous to give a dry, uninteresting book to a child who has been in school only two, three, or four years. The child is not capable of deriving pleasure from reading if he does not understand the language of the book. The teacher must find means by which the desire for knowledge shall be satisfied by reading. Short stories in simple language are delightful to the young, even though they have no special significance as giving new information. They are, however, the basis on which the mind builds for more substantial knowledge.

THEODORE A. KIESEL, B. Ph.,
Instructor in the Kendall School, Washington, D. C.

AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF.

THE first regular meeting of the Board of Directors of this Association was held at the Madison-Avenue Hotel, in New York city, the 16th and 17th of February. Dr. Alexander Graham Bell presented to the Treasurer of this Association the gift of \$25,000, announced at the Twelfth Convention in August last. This fund will be known as the Bell-Volta fund, and will be in the form of a permanent investment, the interest only to be used.

The Executive Committee were instructed by the Board of Directors to appoint a representative of the Association to visit schools with the view to promote the objects of the Association; and to conduct an institute during school time in any school that should so request, giving normal instruction and practical assistance to teachers in active work.

This Committee were also instructed to arrange for a summer meeting of the Association, and to publish bulletins or circulars of information at irregular times as material is furnished or can be secured.

In accordance with the resolutions of the Directors of the Association, Miss Mary H. True has been appointed representative or agent. During the past month she has visited the institutions at Cave Spring, Georgia; Talladega, Alabama; Jackson, Mississippi; Knoxville, Tennessee; Little Rock, Arkansas; Jacksonville, Illinois; Englewood (Chicago), Illinois; Milwaukee, Wisconsin.

The first circular of information is now in the printer's hands, and will soon be issued, giving an account of the word-method of oral teaching pursued at Mr. Greenberger's school, Lexington Avenue, New York. The second bulletin will present illustrations and a description of the Phonetic Manual Alphabet devised by Mr. Edmund Lyon, of Rochester, New York.

Arrangements have been made for the Association to hold its first summer meeting at Lake George, New York, at the Crosby Side Hotel, from the 26th of June to the 3d of July. Because of interest in the object of the Association it has been arranged to open this hotel in advance of its regular season; the rates to members have been made from \$1 to \$1.50 per day. All teachers of the deaf and all persons interested in

the education of the deaf are invited to attend, whether they have become members of the Association or not. All persons who expect to attend the meetings of the Association are requested to notify the Secretary as early as convenient. He will endeavor to answer all questions in regard to the summer meeting and to give necessary information in regard to arrangements with railways and the accommodation of members. Over two hundred teachers and others interested in the education of the deaf have united with the Association, and of these the larger number have expressed their desire and purpose to attend the meeting. All who have received notification from the Secretary of their election may obtain their certificates of membership by remitting before June 1st next the annual assessment of two dollars to the Treasurer, Mr. Charles James Bell, 1437 Pennsylvania Avenue, Washington, D. C.

The following is a program which suggests the line of work the Association intends to follow at the first summer meeting :

In the forenoon of every day two or more lectures, of not more than forty minutes each, will be delivered, followed by questions asked with a view of obtaining information upon the subjects presented, occupying altogether three hours, from nine to twelve o'clock. Subjects :

1. History of the Education of the Deaf.

Historical descriptions of the—

- (a) Sign or "combined" Method ;
- (b) Manual Alphabet method ;
- (c) Auricular method ;
- (d) Oral method.

2. Mechanism of speech.

3. The analytic method of teaching speech.

4. Speech-reading, or lip-reading.

5. The word-method of teaching speech.

6. Principles of elocution.

7. Day-schools for the deaf.

8. U. S. Census of 1890.

9. Visible speech and line writing illustrated by practical work.

10. The Lyon manual.

11. Anatomy of the vocal organs, with models and drawings.

12. Anatomy of the ear, illustrated.

Papers will be expected from members upon the following subjects, among others not yet indicated :

224 *Association to Promote the Teaching of Speech.*

- (a) Personal recollections of older articulation teachers.
- (b) The higher education of the deaf.
- (c) Speech teaching in Southern institutions.
- (d) Methods of the late Mr. Whipple, and the Whipple alphabet.
- (e) Information concerning Grosselin's method.
- (f) Apparatus useful to teachers; hearing tubes, hand mirrors, manipulators, etc.
- (g) Objects of this Association and how best to accomplish the end.

It is only by experience and a full expression of views and opinions that the best method of carrying on our work and of conducting our meetings can be arrived at.

For the afternoon work, from three until five o'clock, there will be given, in practice classes, practical exemplification of the methods of—

- (a) Oral teaching in "combined" method schools;
- (b) Oral work in a manual-alphabet school;
- (c) Auricular training;
- (d) Pure oral schools.

Opportunity will be given during or at the close of the work of demonstration for such questions upon class-room work as are designed for information and are not in the nature of discussion.

Informal discussions will be held every evening, from eight until nine o'clock, upon such subjects as shall be arranged by the Executive Committee. No person to speak more than fifteen minutes. Two or more evenings will be devoted to informal social gatherings.

Teachers and schools and publishers are requested to send specimens of charts, text-books, or school apparatus to be placed on exhibition during the meeting. Persons unable to be present are requested to send written papers.

A business meeting will be held during the session of the summer meeting of the Association.

Z. F. WESTERVELT,
Secretary.

SCHOOL ITEMS.

Arkansas Institute.—The first volume of the *Supplement to the Arkansas Mite* was completed with the May number. We are glad to learn that this excellent publication is to be continued another year. It has most of the good features of the lamented *Raindrop*, and the additional one of illustrations.

Calcutta School.—We announced in the last number of the *Annals* that Mr. Francis Maginn had accepted the position of first teacher in this school. In consequence of the death of Miss Tredennick, Mr. Maginn now feels it his duty to continue at his post of missionary to the adult deaf of Ireland. We are informed that another appointment has been made for Calcutta, but the name is not yet announced.

California Institution.—Mr. Wilkinson will go to Europe this summer and remain about a year. He will visit and report upon foreign schools.

Mr. Tilden's fine statue of the "Base-Ball Pitcher" has been purchased by Mr. W. E. Brown, of San Francisco, and presented to that city. It will be placed in the Golden Gate Park.

Groningen (Netherlands) Institution.—Dr. A. W. Alings, having reached the age of seventy years, has retired from the directorship of this Institution, over which he has ably and successfully presided for thirty-six years. He will henceforth reside at Utrecht.

Dr. H. Reuijl, who has been connected with the Institution since September last, has been appointed director.

Margate and London Asylum.—Mr. A. R. Dodds sends us the following:

On Saturday, April 18, the teachers presented their head-master, Dr. Elliott, with a birthday gift which took the form of a handsome drawing-room clock. Mr. Barrett, who has worked alongside Dr. Elliott for nearly forty years, made the presentation, and read an address expressing the high esteem in which the teachers held their head-master, and offering him their hearty congratulations on this occasion. Dr. Elliott feelingly responded and warmly thanked the donors for their kind recognition. He spoke of the happy relations that had existed between the

teachers and himself in the past, and hoped that the same bond of sympathy which had previously united them in their efforts to advance the welfare of the deaf-mute would continue to develop and add to the educational advantages of the pupils.

National College.—President Gallaudet has tendered the position of Professor of Articulation to Mr. D. L. Elmendorf, senior instructor in the New York Institution for Improved Instruction, but Mr. Elmendorf has felt compelled to decline the offer on account of the serious ill-health of a member of his family, which renders it impossible for him to make any engagements for the future.

Two of the Normal Fellowships for next year have been filled by the appointment of Mr. Oscar Vaught, of De Pauw University, and Mr. G. M. Wilcox, of Carleton College. Both these gentlemen are highly recommended for scholarship and character by the faculties of their respective colleges. Mr. Vaught is also recommended by Dr. Gillett, and Mr. Wilcox by Dr. Noyes.

Nebraska Institute.—Mr. F. L. Reid, a faithful and successful teacher in this school for nearly eighteen years, has resigned his position to engage in fruit culture, and is succeeded by Mr. C. Clayton Wentz, late of the Ohio Institution.

North Carolina Institution.—Mr. E. McK. Goodwin, the head teacher of the Institution, has been appointed "Advisory Superintendent" of the new school to be established at Morganton. Work on the grounds and buildings are to be begun immediately.

North Dakota School.—The following is the text of the compulsory education law of the State, so far as it relates to the deaf :

SEC. 140. Every parent, guardian, or other person having control of any child between 8 and 14 years of age shall be required to send such child to a public school in the district, city, town, or village in which he resides at least twelve weeks in each school year, six weeks of which shall be consecutive; and every parent, guardian, or other person having control of any deaf child or youth between 7 and 20 years of age shall be required to send such child or youth to the School for the Deaf at the city of Devil's Lake for at least eight months in each school year: *Provided*, That such parent, guardian, or other person having control of any child shall be excused from such duty by the school board of the district or the board of education of the city, town, or village, whenever it

shall be shown to their satisfaction, subject to appeal as provided by law, that any of the following reasons therefor exist, to wit:

First. That such child is taught for the same length of time in a private school, approved by such board; but no school shall be approved by such board unless the branches usually taught in the public schools are taught in such school.

Second. That such child has already acquired the branches of learning taught in the public schools.

Third. That such child is in a physical or mental condition (as declared by a competent physician, if requested by the board) as to render such attendance inexpedient or impracticable. If no school shall be taught the requisite length of time within two and one-half miles of the residence of such child by the nearest road, such attendance shall not be enforced, but this provision shall not apply to the deaf children of the State: *Provided, further.* That the common school provided for in this act shall be at all times equally free, open, and accessible to all children over 6 and under 20 years of age, residents of the school districts where they are held, or entitled to attend school under any special provision of this act, subject to the regulations herein made and to such regulations as the several school boards and boards of education may prescribe equitably and justly and not in conflict with the provisions of law.

SEC. 141. Any such parent, guardian, or other person failing to comply with the requirements of the foregoing section shall, upon conviction thereof, be deemed guilty of a misdemeanor, and shall be fined in a sum not less than five (5) nor more than twenty (20) dollars for the first offence, nor less than ten (10) dollars nor more than fifty (50) dollars for the second and every subsequent offence, with costs in each case.

SEC. 142. It shall be the duty of the president of the board of education of any city, town, or village, or the president of the school board of any district, to inquire into all cases of neglect of the duty prescribed in this article, and ascertain from the person neglecting to perform such duty the reason thereof, if any, and shall forthwith proceed to secure the prosecution of any offence accruing under this article, and any such president neglecting to secure such prosecution for such offence within fifteen days after a written notice has been served by any tax-payer in said city, town, or village, or district, unless such person so complained of shall be excused by the board of education or school board for reason hereinbefore stated, shall be deemed guilty of a misdemeanor, and liable to a fine of not less than five (5) nor more than twenty (20) dollars. * * *

SEC. 145. Prosecutions under this article shall be brought in the name of the State of North Dakota before any court of competent jurisdiction, and the fines collected shall be paid over to the county treasurer, and by him charged to the school fund.

Pennsylvania Oral School.—Miss Mary B. C. Brown, an articulation teacher in the Alabama Institution, has been elected principal in place of Miss Emma Garrett, resigned. Miss Brown was trained for the oral method by Miss Garrett. Miss Garrett, while conducting her summer Training School, as explained in

her advertisement on the last page of the present number of the *Annals*, will continue her efforts for the "Home for the Training in Speech of Deaf Children Before they are of School Age."

Texas School.—Mr. John A. Prince, formerly a teacher in this school, died at Hyattsville, Md., of heart disease, aged 40. Mr. Prince was a graduate of the National College. Since leaving the Texas School he has been a clerk in the Pension Bureau at Washington. He was a man of intelligence and high character.

West Virginia Institution.—Miss L. M. Kern has resigned the position of teacher, which she has filled faithfully and efficiently for thirteen or fourteen years.

Western Pennsylvania Institution.—Miss Frances G. Camp has published at the Institution press "Drills in Arithmetic, compiled from Grube, Part Three," 1891, a small 4to of 63 pages. "Except for slight corrections here and there in language and method of expression, Part Third is almost entirely the original work of the class itself." This fact bears witness at once to the excellence of the method and to the faithfulness and success with which it has been applied in Miss Camp's class.

Wisconsin School.—Miss Sarah D. Gibson has resigned the position of Matron on account of the death of her mother, and is succeeded by Mrs. Mary G. Schilling, who has the desirable qualification of being able to communicate with the pupils readily by spelling and signs.

E. A. F.

NECROLOGY.

Mr. JOHN CARLIN, of New York, a prominent deaf-mute, died of pneumonia April 24, 1891, aged seventy-eight. Mr. Carlin was a graduate of the Pennsylvania Institution, and afterwards studied art in Paris under Paul Delaroche. He rose to considerable eminence as an artist, especially in painting miniature portraits on ivory. He pursued the study of literature and poetry under private teachers, and though a congenital deaf-mute acquired a remarkable command of the English language, as may be seen in several contributions to the *Annals*. What

is still more wonderful, he wrote poetry of a high order; probably the best known of his poems is "A Mute's Lament," published in the *Annals*, vol. i, page 15. Ten years before the establishment of the National College Mr. Carlin urged in the *Annals* the importance of collegiate education for the deaf, and when the College was founded he delivered an address at its inauguration in 1864, and received the first degree that it ever conferred—the honorary degree of Master of Arts. A good biographical sketch of Mr. Carlin is published in the *Deaf-Mutes' Journal* of April 30, 1891.

Mr. CLAUDIUS FORESTIER, a deaf gentleman, for many years at the head of a school in Lyons, France, died on the 13th of February last, at the age of eighty-one. Mr. Forestier was a man of ability and culture, and his whole life was given to the service of the deaf. He was the author of several text-books and treatises on methods of instruction. In the *Annals*, vol. i, page 64, Laurent Clerc describes a visit to his school. At that time not only the principal but all the teachers and servants were deaf, the only hearing person in the establishment being Mrs. Forestier.

Miss WILHELMINA TREDENNICK, the founder of the Mission to the Adult Deaf of Ireland, died March 3, 1891. Her attention was first attracted to the deaf by reading Dr. Buxton's article in Chambers's Cyclopædia about thirty years ago, and from that time until her death she gave herself to their welfare with a devotion and self-sacrifice almost unparalleled. On the establishment of the Central Mission Hall in Belfast she left her comfortable ancestral home to reside in the Hall as Lady Superintendent. The illness which resulted in her death is said to have been due to her unremitting labors and anxieties in behalf of the Mission. She had, as the Rev. Dr. Riddall said at her funeral, intense enthusiasm, with the ornament of a meek and quiet spirit. One of the means by which she labored for the welfare of the deaf was the publication of a periodical called *Our Little Messenger*; the advantages of such a periodical she set forth in an article in the *Annals*, vol. xxviii, pp. 219–221. The *Deaf and Dumb Times* for May, 1891, contains an appreciative sketch of Miss Tredennick's life and character, written by Mr. B. H. Payne, Head-Master of the Swansea Institution.

E. A. F.

MISCELLANEOUS.

Normal Training in Sweden.—After many years of agitation on the part of the Scandinavian teachers a new law pertaining to the education of the deaf in Sweden was passed about two years ago. A brief summary of its principal provisions was given in the *Annals*, vol. xxxiv, p. 307. Mr. Olof Hanson furnishes us the following additional particulars of the law, so far as it relates to normal instruction :

The State provides a Normal School, and one of the essential qualifications for becoming a teacher of the deaf is a diploma from this School. Principals of schools must be chosen from the ranks of experienced teachers.

The Normal Department is connected with the Royal Institution at Manilla, near Stockholm. Instruction is free, and provision is made for aiding students who are unable to pay the expenses for board, etc. Applicants must have passed final examinations at one of the State normal schools for training public-school teachers, and received certificates of good moral character, etc.

The instruction at the School, which is chiefly theoretical, covers one year, and includes the following subjects : General survey of the history of deaf-mute instruction ; deaf-mutism, its causes, nature, and effects ; the aim and arrangement of deaf-mute instruction under various methods ; the sign-language, its origin, development, and use in instruction ; the organs of voice, and the manner and means of producing articulate sounds ; a methodical course of instruction ; the general plan of instruction for the deaf (which is prescribed by law) ; apparatus and aids in teaching, and their use ; the organization and management of a school and the laws pertaining to deaf-mute instruction ; practical school-room work.

After a year's course at the Normal School the student is assigned to some institution, where he is to teach a year on trial. At the end of his trial year he receives a certificate from the principal of the school in which he taught, stating in general his fitness as a teacher. He is then to present himself at the Normal School for final examination, covering the entire course of study, and, besides, he is to write a thesis on some subject connected with his profession, and, in the presence of competent judges, demonstrate his practical knowledge of school-room work. If in all these he passes satisfactorily he receives his diploma, which, moreover, states the degree of attainment ; the expressions "praiseworthy," "accepted with praise," "acceptable," and "passable" being used in reference to knowledge and skill as instructor, and the words "very good," "good," and "less good" in speaking of character and conduct.

Provision is also made for paying such salaries as will induce competent persons to enter the profession.

Vatter on Heidsiek.—Mr. J. Vatter, editor of the *Organ der Taubstummen-Anstalten in Deutschland*, director of the Frankfort Institution, a successful teacher and prominent advocate of the oral method, comments as follows in the *Organ* for March, 1891, on the movement begun by Mr. Heidsiek in favor of the restoration of the sign-language in the schools of Germany (see the last number of the *Annals*, page 145):

In view of Mr. Heidsiek's utterances in writing and speech no one can doubt that he is in earnest, thoroughly in earnest, in his efforts *to restore signs in the instruction of deaf-mutes*. The struggle in which the representatives of the *pure German* method of instruction have been compelled to engage will not be speedily brought to a conclusion, nor can its precise result be determined in advance. One thing, it is true, has already been accomplished: the movement introduced by Mr. Heidsiek has given a decided impulse not only to a closer study of the nature of the deaf-mute and his capacity for speech, but also to a thorough examination of the means of instruction at our command, with a view to enlisting both of these in the service of our work more decidedly than has been the case hitherto. This cannot fail to confirm the principle of the German method of instruction, and to promote its accomplishment. The man who through an honest, unprejudiced examination of the various questions brought forward in the conflict of opinions, and a calm estimate of the sum total of the facts established, has come to a sure conviction of the high value of the pure German method, will stand immovably firm in that conviction.

We must not, however, attempt for a moment to conceal from ourselves the fact that the present indications call for serious consideration. Although the German method is accepted in theory, it has not yet, in Germany as a whole, been carried out to its final consequences, and therefore it is not yet able to produce the results that it promises. Many a teacher of deaf-mutes is fettered by the unfavorable circumstances of his institution, and cannot climb to those heights from which the German method in its full capabilities is to be surveyed and estimated. Under such circumstances it is not strange that one lends an ear to the voice of Mr. Heidsiek and loses one's "first love" for the German method; and there is no doubt that through the movement begun by this gentleman the quiet further development of deaf-mute instruction in Germany may be hindered. We say "may" intentionally. Under certain conditions his vigorous efforts will bring us the desired clearing up of the situation.

We are, in fact, in all seriousness brought face to face with the question: *What outward conditions* (duration of the school period, number of pupils, etc.) *are requisite to the carrying out of the pure German method? Is it possible for very large institutions to meet the requirements of the German method?* According to the utterances proceeding from such institutions there seems to be an opinion that *without the use of signs in teaching success is not attained*. If that is really so, then let us make concessions to the large institutions with respect to the use of signs, but let

this be clearly and openly declared in the course of study and plans of lessons, instead of claiming, as hitherto, that instruction is given by the German method when this is not really the case. *An honest separation* will then be effected, and in Germany, as elsewhere, the institutions will be divided into two classes, *one of which will teach by the pure German method, while the other will hold fast to the combined method*. To undertake such a separation is better, and more honorable to our profession, than for us to be casting reproaches upon one another and sending out suspicions into the world. In this way the principle of the German method of deaf-mute instruction is not in the least altered; the statement is merely made, that *at present* under certain circumstances it cannot be carried out. We shall then work quietly side by side and patiently await the action of time, which will bring the desired help *by breaking up the large institutions into smaller ones*, which are better able to meet the requirements of the German method.

The Opinion of the Intelligent Deaf.—In the discussion of methods in Germany, as well as in America and other countries, the opinion of the intelligent deaf has been freely expressed, mostly in favor of the sign-language as a valuable aid in the instruction of the deaf. Mr. E. Walther, editor of the *Blätter für Taubstummenbildung* and director of the Royal Institution at Berlin, thinks the deaf have no right to express an opinion in the matter. In the *Blätter* for January 1, 1891, speaking of periodicals for the deaf, edited by the deaf, he says :

Alas! these deaf-mute authors. However much we may have reason to rejoice that individuals among our former pupils are so far advanced as to be able to express their thoughts clearly and fluently, yet we also know that persons who presume to rise somewhat above the intellectual level of their class are disagreeably conceited, and pretend to be great men. This is especially the case with deaf-mute authors. If they would only endeavor to amuse and instruct, they might be endurable; but they also meddle with matters of which they understand absolutely nothing. If gymnasium pupils had been members of the School Commission recently in session, probably the majority of them would have voted for the exclusion of the ancient languages, the value of which as a means of culture no one can deny; in like manner we readily explain the fact that many deaf-mutes are not fond of articulation, and are enthusiastic for the sign-language, which is so convenient, and the use of which demands no special mental effort. They are not able to judge of the intellectual and eminently practical value of articulation, and should therefore not meddle with the method of deaf-mute instruction.

Mr. Vatter, editor of the *Organ*, has a higher regard for the opinion of the intelligent deaf. He says in the number for March, 1891 :

In the discussions of methods of instruction for the deaf, attention has always been directed to the opinions of deaf-mutes capable of forming a

judgment. While there is no objection to this practice in itself, it must be remembered that what was written by deaf-mutes thirty and more years ago does not apply in all respects to the present circumstances. The instruction that those old deaf-mutes received sixty or seventy years ago was far inferior to that afforded by good schools to-day. We will specify only one point, viz., the use of the *spoken* word in teaching, and the ample practice in lip-reading thus given. In short, deaf-mute instruction has, in the course of time, become something entirely different, and it is surely only right and proper that, beside the *old* deaf-mutes who could have no idea of the progress made during the last half century, pupils of the *modern* German school should also be heard.

Mr. Vatter then gives three letters from former pupils of the Frankfort Institution, aged, respectively, twenty, twenty-three, and thirty years, in which the writers cheerfully testify to the great benefit they receive from their powers of speech and speech reading in communicating with hearing persons.

Blind and Deaf Children.—Helen Keller recently sent the following letter to Dr. Oliver Wendell Holmes:

DEAR DR. HOLMES: Your beautiful words about spring have been making music in my heart, these bright April days. I love every word of "Spring" and "Spring Has Come." I think you will be glad to hear that these poems have taught me to enjoy and love the beautiful spring-time, even though I cannot see the fair, frail blossoms which proclaim its approach or hear the joyous warbling of the home-coming birds. But when I read "Spring Has Come," Lo! I am not blind any longer, for I see with your eyes and hear with your ears. Sweet mother nature can have no secrets from me when my Poet is near. I have chosen this paper because I want the sprays of violets in the corner to tell you of my grateful love. I want you to see Baby Tom, the little blind and deaf and dumb child who has just come to our pretty garden. He is poor and helpless and lonely now, but before another April education will have brought light and gladness into Tommy's life. If you do come you will want to ask the kind people of Boston to help brighten Tommy's whole life. Your loving friend,

HELEN KELLER.

In response to Helen's invitation Dr. Holmes attended the celebration of Froebel's birthday at the Boston Kindergarten for the Blind, April 20, 1891, and on that occasion Helen recited the poem "Spring Has Come," referred to in her letter. She gave it by the manual alphabet, except the last two stanzas, which she recited orally. She had a bouquet in her hand, and touched each flower as she named it in the poem.

The "Baby Tom" mentioned in the letter is Tommy Stringer, a blind and deaf boy recently admitted to the

Kindergarten from Pittsburgh, Pa. He is nearly five years old. He lost his sight and hearing from cerebro-spinal meningitis at the age of three and a half. Helen Keller has taken great interest in the boy, collected money to pay the expenses of his instruction, and insisted upon coming to the Kindergarten with her teacher to assist in beginning his education.

Another blind and deaf child in the Kindergarten is Willie Elizabeth Robin, a bright little girl from Texas, six years old, who came last Christmas. She has already learned 150 words, and can work with the other children.

The Boston *Evening Transcript* of April 22, 1891, tells the following story of Helen Keller :

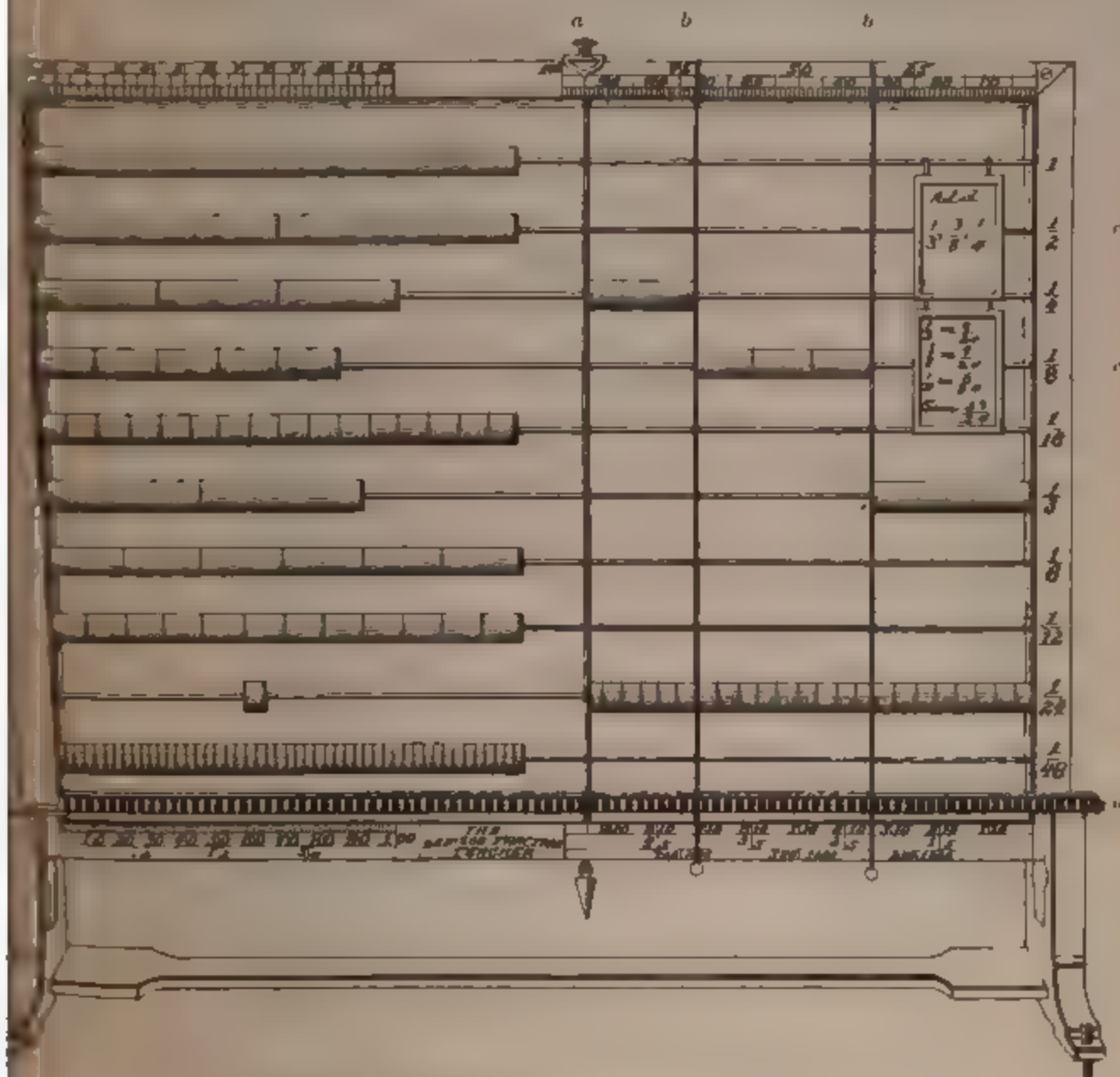
Not long ago she told a gentleman who was calling upon her that she was studying "political economy and civil government"—these big words, by the way, rolling out while she kept her finger lightly at her throat, as if to *feel* with that whether she was speaking. The visitor expressed a great deal of surprise, and asked this deaf, dumb, and blind girl of ten, who so recently was in complete ignorance that human beings communicated with one another, "Do you understand about parties and politics?" "Oh, yes, a little," she said, modestly. "Well, which are you; a Republican or a Democrat?" This was an impertinent question; and Helen seemed to have some consciousness of the fact that, in politics, she was a long way from home. She smiled significantly, and, with finger again at her throat, answered, "I—am—on—the—fence!"

The Denison Fraction-Teacher.—Through an accident which occurred to the plate just before going to press, the representation of this device in the last number of the *Annals* (page 129) was not clearly printed, and we therefore give the illustration again from a new plate.

Mr. Denison has recently made some improvements in the invention, the chief one being that the meter rule marked for centimeters is made a part of the instrument instead of being detached and requiring temporary supports.

Mr. Hanson, in the present number of the *Annals*, speaking of a similar apparatus that he saw in Sweden, probably lays too much stress on the difference in the cost of manufacturing the "Fraction-Teacher" and a simpler form without scales and plumb-lines. The fact is that, while the features that involve the most expense—the frame itself, the cylindrical blocks, and the wires—are an essential part of both forms, the scales and plumb-lines in the "Fraction-Teacher" add immeasurably to its possibilities in the way of illustrating fractions and teach-

ing their operations and determining their exact values; and yet the additional cost these aids involve is really very small, and in the judgment of practical teachers will be many times outweighed by the increased value gained by the device in precision and variety and scope of illustrations and operations.



- a. Plumb line and finger-piece.
 b b. Substitute lines to mark preceding position of plumb-line.
 c c. Paper-match slates with supporting books.
 d d. Incomplete meter rule showing centimeters.

The Church Mission.—The Eighteenth Annual Report of the Church Mission to Deaf Mutes for the year ending September 30, 1890, reports \$8,000 as still due on the mortgage for the purchase of the Home at Wappingers Falls, N. Y., but a note on the cover announces that this mortgage has since been paid. We congratulate the Mission on being out of debt, and hope that the money now needed for new buildings will

soon be obtained. The Report contains a full statement of the excellent work carried on during the past year under the direction of the Rev. Dr. Gallaudet in New York, New England, and New Jersey, and some account of the similar work in other parts of the United States, which is also largely due to his untiring efforts.

The Mentor.—The Alumni Association of the Perkins Institution for the Blind has begun the publication of a monthly periodical called the *Mentor*, and devoted to the interests of the blind. They are endeavoring, they say in a circular letter, “to accomplish for the blind by this periodical a work somewhat similar to that accomplished by the *Annals* for the deaf.” In the April number, Mr. Lars A. Havstad gives an interesting sketch of Ragnhild Kaata, the Norwegian deaf and blind girl who has learned to speak and read the lips by touch, of whom some account was given by Mrs. Lamson in the last July number of the *Annals*. The price of the *Mentor* is one dollar a year. All communications should be addressed to the Secretary of the Publishing Committee, Mr. J. W. Smith, 37 Avon street, Boston, Mass.

E. A. F.

ADVERTISEMENTS.

A HEARING LADY desires a position as teacher in a school for the deaf. She is experienced and perfectly familiar with the sign-language. Address HEARING LADY, care of the Editor of the *Annals*, Kendall Green, Washington, D. C.

A LADY, thoroughly trained and experienced in articulation, desires a position as teacher in a school for the deaf. Address LADY, care of the Editor of the *Annals*, Kendall Green, Washington, D. C.

WANTED, a situation as teacher in a school for the deaf or in a private family. Address Miss O. E. H., care of the Editor of the *Annals*, Kendall Green, Washington, D. C.

SUMMER SCHOOL of Oral Training School for Teachers of the Deaf, established 1881, will be at Forest City, Lackawanna Co., Pa. Eight students enrolled for summer. About thirty graduates teaching in Schools and private families in U. S.; several are Principals of Oral schools. For particulars address Miss EMMA GARRETT, Scranton, Pa., until June 20; from June 20 until August 15, Forest City, Lackawanna Co., Pa. After August 15, Chester, Delaware Co., Pa. (Chester is near Philadelphia.)

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THE TOY OBJECT METHOD.

IN this age, when our profession presents such a variety of methods, each with its able advocates, a young teacher desiring to make an impartial choice would feel considerably bewildered. In deciding upon the merits of any given method, we must remember that however varied the art of education may be, it must always conform to the science which is its foundation. So far as our great educators have laid that foundation, we may turn to its principles for our criteria. There may be and are many excellent methods, and each earnest teacher's plan of work is to some extent peculiarly his own. But in considering them, none can be judged good which do not conform to certain principles.

Of these criteria, two are of paramount importance.

(1) *Does the method recognize the pupil's natural way of learning?* We have at last turned back to nature as the only uniform, consistent, and purely logical teacher. However we may improve on her training, we certainly must study her model carefully for our foundation principles. The natural process by which a child's mind acquires its first knowledge is the one which the educator must adapt, correct, and extend to farther develop the mind in school.

The second principle concerns not so much the manner as the aim of instruction. (2) *Has this method for its aim the drawing out of the child's powers and the formation of good mental habits?* In our zeal for immediate results, we too often think that the most important thing is to teach our pupils to construct good sentences, whereas the true educator endeavors also to form in the pupils' minds good habits, and to teach them to think.

Among the many plans teachers are now using to accomplish these ends, I think the Toy Object Method may claim a place, and perhaps a few excellencies. In common with other object methods, this one requires that language be defined visibly by means of actions, and that actions come first and language follows. It differs from others, however, in dwelling chiefly upon topics clustering around the home life, and in presenting no arbitrary nor detached actions but orderly sequences, both the actions in each lesson and the lessons themselves forming a connected series in which natural associations are the links. These differences may at first sight seem small, but they lead to several important results. The materials used are toys of various kinds, representing the utensils in and about the household. Both teacher and pupils are the actors.

We all agree that only the concrete is fit food for the minds of beginners. When the little minds come under our care they possess all the faculties of the adult, but only one of these, perception, has had enough use for its development. Nature has for years been training this faculty in her own way. *Action, experiment*, have been her maxims, and *things* the objects of her lessons, and those things the common surroundings of the home life. The mind thus trained comes to us full of pictures of home. How clearly the child remembers wash-day, with the bustle, the steam, the hubbub, and the delightful soapsuds he loved to play in! Next he naturally recalls ironing-day, when he sat by the table and saw the wrinkled clothes made so nice and smooth, and, perhaps, burned his little fingers in an attempt to handle the iron.

But the cooking! What a feast of memory we have here. It needs no logic to establish the vital connection between experience and memory in this. How many times the child has traced the mystery of pies to its conclusion; he has repeatedly watched the mixing and baking of cake; he has seen the great white loaves of bread kneaded, moulded, and baked; and O, delight of delights! he has sometimes been allowed a bit of the dough to shape according to his fancy and bake with mother's bread in the oven.

Going outside of the house, few, if any, children there are who have not known the pleasures of the garden, and of the barn with its various inmates—and that wonderful hay-mow! These, with kindred home recollections, are and will be, for some time after entering school, the chief furniture of the child's

mind. The ideas are clear, because gained by his own pleasurable experience. We are always on doubtful ground when we transcend the child's personal experience.

Now, having given us minds filled with these ideas and a faculty so lively as perception, does it not seem the most economical as well as the most natural thing to make use of this material and this faculty to awaken others, to develop thought? We may do much now to form habits of thought; but any natural process by which the child learns must be his own. The child who has taught himself to walk can also teach himself other things, provided they are similar to those already learned. Understanding the condition of his mind, we should only guide the natural processes by which he learns. It is a most difficult task for teachers to bring themselves down to the level of the child's mind and adopt his ways instead of bringing him to theirs. In fact, our work consists chiefly in establishing the connection between the child's mind and outside things—in the first few years of his course, certainly the *nearest outside things*. If the matter we teach finds no natural links of association, it will produce no mental reaction.

Aiming, then, to make use of this abundant material already on hand, we select a variety of toys used in house-work, the language of the kitchen being, perhaps, the easiest and most interesting to the little mind. We begin by talking about the toys, letting the children handle and comment on them. Right here occurs another good point of the method—interest, enthusiasm. The children are full of animation as they show what "mother" did with this or that utensil. The school-room is from this time a place of interest and delight. It has a home-atmosphere which involves no change of ideas, but allows the mind to go on working in the same plane—a valuable point. Interest in the objects is only equalled by desire to know their names; and it is astonishing how soon a little vocabulary is formed. Rarely, indeed, is the kettle called a pan or the tray a platter.

Soon simple actions performed by the teacher can be described by the pupil. Then comes the question as to how the action work shall be given.

It is an important principle in the method that there shall be no unnatural actions for the sake of using certain constructions—no putting a watch on the floor and jumping over it, nor putting one crayon into your mouth and another under your

arm. But if the actions are natural and reasonable, does it make any difference in what order they are performed? Shall we take the tea-kettle off the stove, then take some wood out of the wood-box, then take a dish out of the cupboard? This assuredly is not nature's way, as it was not mother's. What confidence would children acquire in this haphazard way of teaching which would leave but a hazy idea of the purpose of the language? In real life occurrences usually have a beginning, a progression by orderly sequence, and a more or less definite end. So in giving the lesson we represent, action by action, some simple every-day occurrence, say, making the fire; first teaching the necessary nouns in connection with the objects, then giving verbs descriptive of the actions as required.

The following may be taken as an illustration of the first action lesson with toys, before the pupils have been taught conjunctions:

Willie carried some wood. He put the wood into the wood-box. Miss A. put some paper into the stove. She put some kindlings into the stove. She put some wood into the stove. She lighted a match. She lighted the paper. The fire burned.

This is simple language, but it tells a complete story and expresses formulated ideas.

In the next lesson we can review making the fire, and, going a step farther, show how this naturally leads to heating water in the tea-kettle, this latter exercise furnishing enough material for an advance lesson. After learning to make the fire and heat water, the pupils are anxious to cook something. So, with the addition of a very few words, they can describe a simple operation—cooking potatoes or making coffee, for instance. With the aid of the stove, wood and wood-box, a dish-pan, knife, kettle, and some potatoes, the following lesson might be given:

Miss A. put some paper, kindlings, and wood into the stove. She lighted a match. She lighted the fire. It burned. She got some potatoes. She put them into the dish-pan. She poured some water into the dish-pan. She got a knife. She pared the potatoes. She put them into the kettle. She poured some water into it. She put a lid on it. The potatoes boiled.

The series of lessons may be arranged to cover the great variety of work done in and about an ordinary household.

The following is a brief outline of the work actually given a class in one year:

GENERAL TOPIC: THE HOUSEHOLD.

- | | |
|---------------------|----------------------------|
| 1. Making the fire. | 4. Sweeping and dusting. |
| 2. Cooking. | 5. Mopping. |
| (a) Frying. | 6. Washing. |
| (b) Broiling. | 7. Ironing. |
| (c) Baking. | 8. Parlor work. |
| (d) Roasting. | 9. Chamber work. |
| (e) Boiling. | 10. House cleaning. |
| 3. Marketing. | 11. Entertaining visitors. |

Other outlines can be made to cover the work in the barn, garden, etc. By making the series orderly and fitting each new lesson into the preceding one, the old language is continually reviewed and connected with the new, thus making the chain continuous as we go along.

The language will necessarily be simple at first, and suited to the child's mental digestion. But in the course of time it admits of as much complexity as the pupil is capable of grasping. Most of the natural relationships of things in the universe can be taught with things similarly related in the household. There is this definite advantage over teaching them in any other way—there is no need to invent circumstances to explain the language. Very many times the pupil's vigor is spent in the effort to see any connection between the idea and the language taught.

The first work must be given action by action, as it is too much to expect the untrained mind to hold a series of actions and the language describing them. But in the course of a few weeks a group of actions can be performed together, and eventually the whole lesson may be given at once. After each lesson, requiring the pupils to write a home-lesson on the topic serves to review the language. It also gives opportunity for the pupils to generalize and make original application of what they have learned. For instance, the teacher on Monday gives an action lesson on washing, and the pupils learn the unknown terms used in describing that operation. On Tuesday, she asks them if they have seen washing done at home, and if it was done in just the same way. Scarcely a pupil will reply in the affirmative. All will be eager to use the new language in describing similar, yet not the same, processes at home. Other reviews may be had by means of a series of hastily-sketched pictures, by spelling commands, writing a lesson to be acted

out, etc. This work may profitably continue, along with other language exercises, through the first three years of the child's education.

Now, in the course of this time, what have we gained by such teaching?

(1) The pupils have acquired a vocabulary of homely language which every deaf child needs, and if it is not learned in this part of the course, when will it ever be taught? How many times I have heard the educated deaf confess that they either did not know much of this language or had been compelled to learn it with shame after leaving school.

(2) In teaching the language we have followed nature's plan and let the pupil learn to do by doing. We have departed so little from his mental habit that there was almost no coercion of the mind. The language given fits his mental pictures. The child had his ideas formulated beforehand, and we have simply given him the means of expressing them.

(3) The pupils have from the first seen the utility of the language and taken great pleasure in telling how they will use it at home. Scarcely a letter-day comes that one or more members of my class do not write of what they have been learning, and that their parents will be surprised to see how much they know of the home life. Teachers are usually heard in the autumn deploring how much the pupils have forgotten during the summer. This is not the case when in their every-day life the links of association are continually calling up the language. Two years ago a second-year pupil of mine went home full of plans for the display of his knowledge. Of his own accord, he took his slate and pencil, and sitting down by the kitchen table where his mother was at work, wrote lesson after lesson from her actions. Could there be better proof of the practical nature of this method?

But the ease with which language is acquired and used is not the only consideration. We have followed nature's plan, but have we accomplished anything towards forming good mental habits and training the mind?

(4) There has all this time been a reflex effect on the mind which some may consider of more value than the language taught. Is it not reasonable to think that the habit of carrying the mind from one link to another in an unbroken chain of reasoning, the habit of holding this series of events in mind while reaching out for yet another link to add to the

chain, will have a good effect in establishing different habits of thought from those followed by pupils taught in a fragmental way?

Sequence of actions leads to sequence of thought, or orderly thinking—a most desirable thing.

Then, again, this particular attention to sequences opens the way for an easy development of tense, and the assimilation of those troublesome time-phrases as they are properly introduced. Habits of accuracy, inquiry, and close observation are formed by the literalness and fidelity to what the eye sees. And lastly, memory, which depends so much upon the art of paying attention, cannot but be strengthened by the concentration and close attention required in the development of these lessons.

These points are not mere theoretical ones. They are borne out by four years' use of the Method. It was first used in Iowa on one of the so-called "stupid classes" which are the bane of every institution. It there demonstrated its good points by fitting for promotion pupils thought hopelessly dull. Bright pupils will learn by any method; but the best test of a method is its adaptability to dull minds.

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THE FREQUENCY AND EXTENT. OF ELLIPSIS.

THE study of physical science during the last twenty years may be said to have established the principle that in all the processes of nature there is neither loss nor waste. While there is often great change, and while the objects upon which nature lays her hands may be transmuted into a great variety of forms, nothing is ever annihilated. The doctrine of the conservation and correlation of force has demonstrated that heat, light, sound, chemical action, electricity, and magnetism are all different forms of one force, that each may be changed into motion, and motion again into each and every other form of energy. This law of economy in the physical world has its analogy in the realms of speech. As nations advance in civilization, there is a constant tendency to adopt fewer and shorter words. The losses which have occurred in our English speech have been compensated by a greater degree of energy. The

language of a people is, generally, an accurate measure of their place among the civilized nations of the world. It has been a matter of observation that as soon as a nation or tribe takes its first step from barbarism toward civilization, the presence and operation of the law of economy begin to manifest themselves, and continue in force as long as there is progress. I do not know of anything that illustrates this tendency in language better than the following extract from one of our most famous philosophers :

In a Ricaree vocabulary extending to fifty names of common objects which, in English, are nearly all expressed by single syllables, there is not one monosyllabic word; and in the nearly allied vocabulary of the Pawnees, the names of these common objects are monosyllabic only in two instances. Things so familiar to these hunting tribes as *dog* and *bow* are in the Pawnee language *ashakish* and *teeragish*; the *hand* and the *eyes* are, respectively, *iksheeree* and *keereekoo*, for *day* the term is *shakoo-roveeshairel*, and for *devil* it is *tsaheekshkakoorairah*, while the numerals are composed of from two syllables up to five, and in Ricaree up to seven. That the great length of these familiar words implies a low degree of development, and that in the formation of higher languages out of lower there is a progressive integration which reduces the polysyllables to dissyllables and monosyllables, is an inference confirmed by the history of our own language. (Herbert Spencer's "First Principles," p. 319.)

Language is a living, changing thing, and can never become fixed until national progress has come to an end. Yet there are here and there purists who cannot tolerate the changes and accretions which are constantly taking place. To define the limits of English speech and exclude all vulgar elements Dryden suggested an academy, and Swift would have the government stereotype it forever, after some necessary alterations. So marked have been the changes during the past few decades, that the non-appearance of a word in our most recent dictionaries is no ground of objection, for new words become naturalized among us in an astonishingly brief period of time.

The law of economy, in speech, demands that this power, one of the noblest servants of man, shall be used for lofty purposes, shall present thought in the purest, briefest, and clearest words possible, suppressing everything superfluous and avoiding all extravagance. The present generation is an age of rapid transit; the telephone and the telegraph have increased, immeasurably, the velocity of human communication. The news of the battle of Waterloo reached London three days after the event, but now the speeches of Mr. Gladstone are read thousands of miles away the morning after their

Delivery. We are, perhaps, not any more thoughtful than our fathers were, but we are far more intolerant of prolixity. The thoughts and purposes of men reaching out with so much intensity make them intolerant of the set forms of speech. The necessities of modern daily life, the scientific appliances which now form part of the furniture of every well-equipped office, compel us to listen, to think, and to speak, with the utmost regard to the economy of time. That this high-pressure system of life should have its influence upon our national speech is inevitable. "If there is a man on earth," said a modern writer, "tormented with the desire to get a whole book into a page, a page into a phrase, and this phrase into one word, that man is myself." The facts here noted of language in general are also true in the life of the individual. The ornate and flowing diction of the young clergyman soon passes away under the stern, often unpitying, but wholesome, influences of the busy world. In the latter part of his life Daniel Webster used fewer words to express the same idea than in his earlier speeches. Cæsar notified the Senate of the results of his expedition and his victory in three words. The Spartans, or the Lacones as they were also called, have transmitted their contempt for speech in one English word, laconic; to be laconic is, etymologically, to be a Spartan, and it is a curious fact that a great number of men distinguished for their Spartan character have been silent men. It is the rustic, the unlettered and the uncultured man, that spin their yarns to interminable length. "More matter with less art" is an exhortation that many might yet profit by, for Shakespeare's Polonius has still too many followers. It would be taxing the pages of this magazine too much to introduce here the difference between the narration of an incident by a person of culture and one who had never disciplined himself in the habit of thinking accurately and logically, but the letter of Hamlet to Horatio (Act IV, Scene VI) is an example of the one, and the evidence of the clown (*Measure for Measure*, Act II, Sc. I), the nurse (*Romeo and Juliet*, Act II, Sc. VI), and Dame Quickly (*Henry IV*, Part II, Act II, Sc. I) are examples of the other.

It is astonishing, when we begin to think of it, what an amount of ellipsis our English speech tolerates. "Max Müller is credited with saying that interjections, together with gestures, the movements of the muscles of the mouth and of the eye, would be quite enough for all the purposes which language answers with the majority of mankind."

An Englishman at a dinner in China, wishing to know the nature of a dish set before him, wanted to ask a Chinaman at his side what it was ; but the Chinaman knew no English and the Englishman had no knowledge of Chinese. So he turned to the Chinaman and said, "Quack, Quack?" pointing to the dish. "Bow-wow," was the quick response.

In teaching language to the deaf, it is necessary every day to urge them to use brief, easy sentences, such as can be spoken or written quickly, with the ellipsis of as much superfluous matter as possible. Such writing will often be stiff, sometimes faulty, but if we can secure the right sense with a fair degree of accuracy, we need not be disturbed if the grammarians are not quite satisfied. Much of our teaching is too stately and formal ; our pupils do not get hold of the way to abbreviate in the right place. Those who keep up their language after leaving school are apt to write with a fulness and a detail that is exasperating, refusing to let a single thought be supplied. My attention has been drawn to this fact by some letters which have fallen into my hands, and inasmuch as there are tendencies in English speech to suppress certain forms, it may be worth while to notice what some of them are :

1. The ellipsis of the verb *to be*.

This perhaps is the most common, and the most readily supplied of all omissions. "No one so deaf as he that will not hear ;" "What to me, fame?" To one accustomed all his life to full, complete sentences, there must appear something quite wrong in "Where now the Roman? Greek?" If informed by his friends that such omissions are not uncommon, he will no doubt find it difficult to reconcile this elliptical license with the persistent demand of his teachers for the constant insertion of the parts of this verb. The boy who cries "Coming, sir," uses all the speech necessary, and when in response to a proposition we clip a whole sentence into "Agreed," the purposes of language are fully complied with. "Half-past nine and no mail yet," is clear enough, but it is taking great liberty with speech. The Frenchman has to be careful to say, "The sun rises at seven hours of the morning and sets at five hours of the evening," using seventeen words where our elliptical usage needs only nine. In animated description, in sudden transitions from one subject to another, and in short, pithy propositions all parts of the verb *to be* are often omitted. "Dinner ready?" "Not yet," is a sample of what I wish the

deaf pupils of our schools could hear or see more of. In such expressions as "He seemed [to be] happy," "We elected him [to be] president," "It made him [to be] sick," "I found the slate [to be] broken," all are the result of ellipsis. In drawing attention to these contracted sentences, it is necessary to say that the power to use elliptical speech is dependent upon a knowledge of the full construction; yet with this caution, it is also well to remember that omissions which have become stamped upon our vernacular are the forms to be taught from the beginning. The use of language by the deaf in adult life will be confined almost wholly to conversation, and must, therefore, be as monosyllabic and as expressive as possible. It is difficult to make an orderly arrangement of words commonly suppressed, for there is hardly a sentence spoken or written which does not leave some word to be supplied.

2. The ellipsis of the sign of the infinitive, and often of the verb.

The history of the place of the infinitive in the language of the past shows how little distinction there must have been between the noun and the verb. In some of these languages it had all the cases of a noun. The Latin infinitive *amare* is said to be the dative of an older tongue, and it is a singular coincidence that the sign *for* of the dative was the preposition accompanying the infinitive in early English. *For* with the infinitive has, however, long since passed away. It survives, I think, in such examples as "I went for [to take] a walk." "I went to the city for [to buy] a hat." "A lady bought some cloth for [to make] a dress." Not only has *for* with the infinitive become obsolete, but now after *bid*, *dare*, *need*, *make*, *see*, *feel*, *heard*, we omit the sign "to." *Had* and *help* are perhaps the latest addition to the list: "I had a box made." "Help me lift this trunk." Sometimes we omit part only of the infinitive, as "It is better to have loved and [to have] lost than never to have loved at all." "Have you been to [visit] New York?" "Have you been to [see] the exhibition?"

3. The verbs *go*, *come*, *turn*, and *hasten* are often dropped: "To bed at once." "Away with you." "I must back to the city." "I will after him." Verbs of granting and bringing have the same peculiarity.

4. The constant use of the possessives by the deaf is a source of mortification. The sense of possession is quite strong, and it is nothing unusual to find in their letters such phrases as

"my family" and "my baby." It would seem that a little attention here would soon produce the right results, but the fact is a little attention does not do it. In order that they may be able to ask, "How is father?" "How is mother?" "Did you see brother Tom?" "Where is cousin Charles?" our pupils must have some little insight into the use and propriety of ellipsis. These are little matters, but the omission of these possessives in the right place would add very much to the satisfaction which our pupils may give their friends in the letters they write. This ellipsis may be carried a little farther as in the case of churches, famous buildings, hotels, and streets: "I visited St. Paul's." "I attended Trinity." "I stayed at the Thorndyke." "We traded at Stewart's."

5. Another form of ellipsis, and one which may be said to be growing more frequent every day, is the dropping of the relative pronouns. Much as may be said of the need of teaching the deaf in our schools the use of the relatives, there are weighty reasons why they should be encouraged to express themselves in language free from these parts of speech. The best writing in these days has rarely more than one relative to a hundred words, and if the whole number were suppressed, we should be no worse off than our ancestors were, who said all they had to say—and they spoke to some purpose too—without one relative pronoun. The discussions on these pronouns, as reported in our school papers, have turned upon a few forms of the relative, but if the diction of the deaf is to be interwoven with these words, "that" and "whom" ought to receive just as much attention as "who" and "which." The evolution of the relative in its inception was simply an expedient for getting rid of a conjunction and a pronoun.

"I had a dream [and it] which was not all a dream." "We serve a master [and him] whom we love." "There was a man sent from God whose [and his] name was John." "The poem was written by Longfellow, [and he] who also wrote *Evangeline*."

There is one form of relative teaching that we ought certainly to discourage. It is something like this: "The man who is standing near the fence wears a straw hat;" a statement that can be clipped into "The man near the fence wears a straw hat." "He did right" is certainly better than "He did what was right." If I were spelling to a deaf-mute I would say, "Bring me the chair in the corner," rather than use a rel-

ative after "chair." If a pupil were asked, concerning a number of men, "Which is the principal?" I cannot conceive of anything more trying to one's patience than to wait for "The man who is standing near the door talking to Mr. White is the Principal of the Deaf and Dumb Institution." "A man named David Smith" is better than "A man who was named," etc. So "The friends thou hast," "The man we met," "The book I lost," are all of them sufficient without the relative. Instruction from the teacher concerning the use of these words will unquestionably be necessary, and for literary work they may be said to be indispensable, but the average pupil of our schools will never write literary English. It is important that the little he gets should be put into correct form, and this his teachers can do by advising him to suppress his "whiches." In this connection, I wish to place in parallel columns a school composition illustrating the use of the relatives and the same story with the relatives omitted. I use this specimen of school work because it is good; not too good, but apparently genuine, honest work; and the teacher who has brought about this result has everything to be proud of, so far as teaching the relatives is concerned. It is a description of a picture, and is taken from the *Silent World* of December 4, 1890:

(Relatives.)

That is a picture of five children who are playing on the beach. There are two girls and three boys. One of the girls who is standing on the beach is looking at the children. She wears a blouse and a skirt that seem to be somewhat nice. The boy who is lying on his breast on the shore is leaning his chin on his hands, and his elbows on the sand. He wears knee breeches and lace shoes. The other boy that crouches on his legs seems to be digging in the sand with his hand for clams. He is barefooted, for he has no shoes and stockings. He has on a hat which looks like a straw hat. Another boy that sits on his lower legs that are on the sand is looking at the cat which I think is looking at the boy who is lying

(No Relatives.)

That is a picture of five children playing on the beach. There are two girls and three boys. One of the girls on the beach is looking at the children. She wears a blouse and a skirt. They seem to be somewhat nice. The boy lying on his breast on the shore is leaning his chin on his hands and his elbows on the sand. He wears knee breeches and lace shoes. The other boy crouching on his leg seems to be digging in the sand with his hand for clams. He is barefooted, for he has no shoes and stockings. He has on a hat. It looks like a straw hat. Another boy sitting on his lower legs on the sand is looking at the cat. The cat, I think, is looking at the boy lying with his breast on the sand. He has a wooden spade and I

with his breast on the sand. He has a wooden spade with which I think he is going to dig. He does not dig because the head of his wooden spade is sticking in the sand. There is a small wooden pail on the sand. The shore on which the children are playing is sandy. On the hill there is a house which is perhaps called a cottage. The other girl that is sitting on the shore is leaning her left hand on the sand. She has a fine head of hair which hangs down her back. A woman is standing on the floor of the porch looking at the children that are on the shore. She is leaning her right hand against a post of the porch.

think he is going to dig. He does not dig because the head of his wooden spade is sticking in the sand. There is a small wooden pail on the sand. The shore where the children are playing is sandy. On the hill there is a house, perhaps called a cottage. The other girl sitting on the shore is leaning her left hand on the sand. She has a fine head of hair hanging down her back. A woman is standing on the floor of the porch looking at the children on the shore. She is leaning her right hand against a post of the porch.

It will be seen from the above that there is no loss in perspicuity by omitting the relatives, the liability to error is greatly removed, and a gain of more than ten per cent. in the number of words used is worth considering. The subject, however, is not one that requires a rigid, iron-bound, inelastic practice. Teachers can very readily determine what pupils to encourage in a similar use of relatives, and what pupils ought to suppress them. There are a great number of expressions where the relative is used without any antecedent, as in "I know who," where the relating word is omitted. The following is an example of a class of so-called errors quite common in English speech: "Such are a few of the many paradoxes one could cite from his writings and which are now before me." It is the dropping of the relative after "paradoxes" which makes the phrase "and which" appear an error. It may be said of grammarians generally that selected examples of false syntax are often only cases of elliptical usage. It is possible of course to carry the ellipsis of language so far as to obscure the sense.

6. The ellipsis of connectives.

Horne Tooke tells us that all connectives can be traced to other parts of speech. This is certainly true of a great number, but whether all connectives could be derived from our own language is a matter of some question. The practice of dropping the connectives is permissible only when they can be

supplied by the mind promptly and correctly. In the example, "He was a learned [man and he was a] wise [man] and he was a] good man," all the words bracketed are superfluous. It is a good practice to teach the deaf to drop part of the verb after a conjunction. "We have finished the lesson, but you have not [finished it]." "James tried to jump over the fence, but he could not [jump over it]." "A boy asked his father to give him some money, but he would not." After *if, though, yet*, the verb *to be* with its subject is omitted: "Though [he was] poor, he was honest." "He seemed as if [he was] deranged."

It is customary to drop "that" in such phrases as *I hope, wish, think, said that*, but this is one of those few instances where the retention of the full form is to be preferred. Its presence serves to help the memory to select the proper order. The full expression is also to be preferred at the beginning in the use of *until*: "She swept the room [until it was] clean." "He planed the table [until it was] smooth." "He heated the iron [until it was] red." As, however, the pupil advances in his course, the ellipsis of *until* ought to be encouraged. It is a fair question whether this last omission might not be taught from the beginning, and if there could be enough practice in the elliptical usage to guard against the inversion of words in such sentences as "He rubbed his slate dry," the objection against the omission would be removed.

7. Another device to economize words is the English equivalent of the ablative absolute. Concession, purpose, time, degree, condition, can all be expressed by the participles. "Writing carefully, you will write well," is briefer than "If you write carefully you will write well." "Troy being taken, Eneas came into Italy," is the equivalent of "When Troy was taken Eneas came into Italy." The grammatical equivalents found in the English language are of great number, and these the deaf ought to have some instruction in. Great variety of expression is not likely to be attained, but we may use such expedients as our language contains to make the diction of our pupils as flexible as possible. This must be accomplished by the teacher, for the deaf, by the nature of their deprivation, are unable to exercise that power of the imagination which combines and re-constructs under the laws of association for the higher purposes of education. Any discussion of the exercise of the imagination by the deaf must proceed upon a careful definition of the distinction between it and fancy, between the mathe-

matical and the philosophical imagination, and the contrast of all these with that faculty which revels in the grotesque and the irrational, commonly called the phantasy.

8. Not only are words and phrases omitted in speech and in writing, but sometimes we omit a whole sentence: "If he only knew what he had lost," we say, leaving the conclusion to be supplied. This single illustration is characteristic of a large class of elliptical sentences. Dean Alford notes the following instance of ellipsis in the liturgy of the Episcopal service: "We do not presume to come to this Thy table, Most Merciful Lord, trusting in our own righteousness, but [we do presume to come trusting] in Thy great mercy." Those teaching articulation would certainly find it to the advantage of their pupils to use the shortest words and the briefest sentences. A pamphlet used by the articulation classes of the Rochester Institution has fallen under my notice since writing the above, and I find the usage here recommended followed throughout the pamphlet, in harmony with the speech of every-day life. For those who will be compelled to write, I have no question that they will avoid many errors, have clearer ideas, and understand books better if they accustom themselves, before leaving school, to the elliptical usage of our English speech.

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THE VALUE OF ARCHITECTURAL DRAWING TO THE DEAF.

IN offering to the young men in our schools for the deaf some hints concerning architectural drawing and its importance to them, I indulge the hope that it may meet with as appreciative a reception as it has done in the National College. The pleasure and duty of helping those who may have the purpose of learning drawing, design, and the principles of building construction, so as to fit themselves for work in an architect's office, are my reasons for so doing.

Architectural drawing has been very popular in the College, as it has been taught for several years. This growing interest goes to prove that it is fully appreciated, and, besides, the results are seen in the graduates who are now earning a good livelihood in architects' offices. Reports from them have directly or indirectly come to me that they think the course as now pursued in the College is the best possible. A connection of

ten years with this department enables me to tell how they were taught.

A practical question naturally suggests itself, What is required for the making of a successful architect? Love for work, industry, patience, perseverance, and conscience. Let those who incline towards architecture provide themselves with drawing-boards, paper, necessary materials and instruments, and then practise out of school hours, one or two hours, three afternoons a week. What every pupil asks is, what course will be most likely to secure the results he seeks. To acquire the knowledge of elementary drawing, on which art is based, is a primary step. The order of requirement here pursued is :

(1) Free-hand and mechanical drawing.

(2) The names and use of instruments.

(3) Geometric problems and perspective.

(4) Pen and ink sketching and tracing.

(5) Details of building construction and finish of plans, sections and elevations, etc.

(1) The purpose of this first course is to equip the pupil as a thorough and practical draughtsman. It requires of him abundant practice of free-hand and mechanical drawing, with a proper understanding of the effects of light and shade, and something of water-coloring. Drawing is the essential element of his profession, for without a knowledge of it his way will be strewn with many impediments.

(2) Next in order he is to know the names and uses of instruments. He must learn how to handle the instruments properly ; squares, triangles, plans, sections, elevations, etc., are, by these means, constructed.

(3) He is to learn something of geometric problems and perspective, for they are employed in architecture. Let him construct all the problems he can, and understand them thoroughly, for they must be produced in his work from memory. Perspective is a useful art intended to assist the architect to complete his designs, so as to exhibit them in a view such as they would present to the eye of a spectator when constructed.

(4) In inking in and tracing, constant practice is important ; nay, altogether indispensable. See that each line be firm, distinct, and even. It is only by practice that readiness in so doing, with neatness and accuracy, can be acquired. It will facilitate the training of the eye and hand to a high degree of accuracy.

(5) The pupil, having acquired readiness in this, may next learn all the mysteries of house construction that he can; step by step, design and drawing are to be laid down, each to a scale, and thoroughly worked out. At first a design for a plain frame house or cottage is preferable, for plans of large brick or stone houses will complicate matters. With a small one he can best begin work. He is first to draw all to a given scale in light pencilled outline, and then ink the lines afterwards. I give the order of drawing to a scale: plans, sections, and elevations, and details of the house, construction of foundations, chimneys, etc.; frame work, joints, etc.; sections through partitions, doors, and windows. Lastly, write out specifications for the purpose of estimates.

A thoughtful pupil will, by these means, very soon become familiar with all the methods of construction. He must work hard. He must judge for himself. He must himself cultivate the art, and if aided by conscience, patience, and perseverance, he will bid fair to make a good architect. This is the only way to success.

When he is graduated by his school, he is advised to go at once to an architectural school if he has the means at his command, for the only way to obtain a proper training is through a good course of study. On the other hand, should his means be limited, he should try to get into a first-class architect's office. It is worth the effort even though he does not get pay for the first year or two. Better work for nothing in a good place than for anything in a second rate one. Afterwards, if he shows ability, his prospects are fairly assured.

To meet the wants of those who desire by themselves to learn how to make and to read drawings relating to house construction, a few books may be recommended: "Mathematical Instruments and How to Use Them," by F. Edward Hulme; "Practical Draughting," by T. P. Pemberton; "Text-book of Mechanical Drawing," by W. M. Minifie; "Elements of Perspective," by Christina Sullivan; "Practical Lessons in Architectural Drawing," by William B. Tuthill; "Architectural Perspective for Beginners," by A. Wright; "Mechanical Drawing," by Linus Faunce; "A Concise Glossary of Architecture," by John H. Parker, C. B.; "The Five Orders of Architecture," by Giacomo Barozzi.

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THE COMBINED SYSTEM OF INSTRUCTION.*

* * * I WILL beg you to believe that however I may feel myself compelled to criticise certain methods and measures which have been, of late years, brought prominently before the public, all who labor with pure motives for the welfare of the deaf command my hearty respect and admiration, even though we may differ as to the best means of promoting this end. And I am not without hope that the day is near when all differences will be reconciled, and all antagonisms in a cause so worthy as that you are met to advance shall be known only in the records of history.

The education of the deaf in schools established especially for their benefit has been going on for a century and a half. The practice of the two chief methods, the manual and the oral, has continued for a similar period. But on the present occasion no attempt will be made to narrate the history of deaf-mute instruction, nor of the war of methods which has been waged with varying degrees of intensity since the days of the founders of the opposing schools.

It is rather to certain events occurring within the past thirty years, and results flowing from them, that attention will be directed, for it is an interesting fact that during this shorter period, which may be spoken of as the *renaissance* of the teaching of the deaf, most surprising progress has been made on many lines, all leading toward increasingly beneficent results.

During this period schools have multiplied in all civilized countries; conventions of instructors and principals or headmasters have been held with growing frequency: yearly meetings of educated deaf persons, like that now convened in Scotland, have become common in Europe and America; all these assemblies, as well as international congresses of instructors and also of the deaf themselves, have discussed with eminent advantage important educational and social questions; hundreds of journals have been established, and are being widely circulated, devoted exclusively to the promotion of the interests of the deaf; in many schools the course of study has been

* Extracted from an address delivered before the "Second Congress of the British Deaf and Dumb Association" at Glasgow, Scotland, August, 1891. The address is given in full in the *Silent World* of August 6, 1891.

lengthened far beyond the meagre limits which obtained during the first century of deaf-mute education, covering in many instances a curriculum preparatory to the college or university, and in one, at the capital of the American Union, affording the higher academic education itself, with degrees in the arts and sciences to its graduates; in America, where for forty years previously the manual method of teaching had exclusively prevailed, the last thirty years have witnessed a notable development of oral teaching, and this method has made marked progress in Great Britain, France, Italy, and other countries of Europe; in all parts of the world public appropriations for the education of the deaf have increased, and in this country the government of Her Gracious Majesty has gladdened the hearts of the deaf in all lands by the appointment of a committee of distinguished and benevolent men, the result of whose intelligent and disinterested labors is now seen in a measure pending before Parliament, which is intended to secure the priceless boon of education for all the deaf of this kingdom.

This general progress and organized activity in the cause in whose interest this meeting is held have naturally stimulated individual efforts of many sorts. A vast amount of earnest, practical work, fruitful in the best results, has been undertaken with success. At the same time not a few well-meaning, but opinionated and impracticable, not to say visionary people, yielding their reason to enthusiasm engendered by brilliant results in cases purely exceptional, have striven well, but not wisely, to attain the impossible.

Others, not so well meaning, have resorted to misrepresentation, claiming, as the result of their teaching, abilities and powers which had been bestowed by nature and never lost, and often declaring that by their method they trained all who sought education at their hands, when in point of fact they retained only the gifted few, ridding themselves as quickly as possible of those less capable, and hence most needing the education which was their right.

Promoters of one method of teaching have often sought, ungenerously, to advance their own cause by undervaluing the merits of that of their opponents, and have, not infrequently, caused or permitted misrepresentations to be circulated, which have proved seriously misleading to the public. For example, a few months since a leading New York newspaper

published an "interview" with a prominent principal of a school for the deaf who had a short time before been appointed secretary of a new association for promoting oral teaching. This gentleman was made to say: "It has now been demonstrated beyond cavil that all deaf-mutes can be taught to speak," and when asked if he had been correctly reported, he laughed and replied: "Oh, no; I said no such thing." And yet, so far as the speaker is aware, no public correction of this most unwarranted statement has ever been made by the person with whose name it was connected, *apparently* by his own authority. Very many of those who specially advocate the oral teaching of the deaf have maintained that no distinctive feature of the manual method was worthy of consideration; that the sign-language ought never to be used; that the manual alphabet ought to be discarded; and not a few of the supporters of the manual method have been equally earnest in their rejection of all oral teaching.

Happily, however, while this contention of extremists has been going on, there have been those who have had the wisdom to perceive that while neither of the opposing methods could fully meet the demands of the complete education of all the deaf, each possessed important advantages which the other lacked. And so there has come to be recognized, notably in America, a *Combined System*, which includes, under adaptable and elastic conditions, all features of all methods which can be shown to be of value to any considerable number of the deaf.

The agreement which has been reached in the United States as to the relative value of the once opposed but now harmonized methods cannot be better set forth than by quoting a series of resolutions unanimously adopted by a convention of instructors held in California in 1886, at which there were in attendance several hundred delegates from all sections of the country, among whom there were supporters of every known method of teaching the deaf.*

In the broad sentiment of these resolutions it will be seen that the Combined System as it exists in America to-day includes schools where the pure oral method prevails.

*For these resolutions see the *Annals*, vol. xxxi, page 249. From the *Annals* the following amendment, offered by Mr. J. A. Gillespie as the closing sentence, and unanimously adopted, was accidentally omitted: "And that those who have sufficient hearing to distinguish sounds should be taught aurally."—E. A. F.

And it might equally embrace, as it no doubt will in the near future, schools in which pupils will be gathered whose inability to acquire speech has been demonstrated, and whose education should, therefore, be carried on wholly by the manual method. And there might also be separate schools, as there now are distinct classes, in which the aural method could be practised, embracing pupils who are little more than hard of hearing, and who really have no need of the peculiar aids attached to the oral or to the manual methods.

This comprehensive application of the term *Combined System* is, however, not general. The term is commonly used to characterize the practice of bringing together in one establishment, under conditions more or less varied, the several accepted methods and expedients for teaching.

It would be interesting, did time permit, to show how many combinations are actually effected in the American schools, with excellent results, of methods once deemed wholly inharmonious and incompatible : but without going into such particulars a few statistics only can here be given. At the beginning of the school year lately closed there were 84 schools for the deaf in the United States and Canada, containing 9,652 pupils. Of these schools, 13 with 402 pupils practise the Manual Method ; 19 with 1,104 pupils the Oral ; and 52 with 8,146 pupils sustain the Combined System ; and in these latter schools 2,818 pupils, or more than 34 per cent., are taught to speak.*

Before determining the relative value and proper adjustment of the several methods in a comprehensive scheme for the education of the deaf, which will be attempted later on, it is important to consider which of the two leading methods, the manual and the oral, should have the preference, were one to be used in the absence of the other. For although in America such an alternative, often pressed in the past, will probably never be seriously urged in the future, in Europe the oral method is not only practised in many countries to the exclusion of the manual, but is accorded the sanction of the government in at least one prominent State.

That the results of this imperative adoption of the oral method are far from being satisfactory, or promotive of the best interests of all the deaf, it will not be difficult to show.

* Full statistics on this subject are given in the last January number of the *Annals*, pp. 64-69.

And with equal ease can it be made to appear that by the practice of the manual method alone, with no aid from the oral, the entire body of the deaf can be so trained and educated as to become intelligent, happy, self-respecting, self-supporting, God-fearing members of society. Indeed, this last proposition needs but little discussion. The evidences of its truth are here present in the members of the British Deaf and Dumb Association. Witnesses to its soundness are to be found in this country, in France, Italy, Sweden, the United States, Canada, Australia: in short, wherever the manual method, well and intelligently practised, has been maintained for any extended period as the exclusive basis of instruction.

The successful and happy lives of graduates of manual schools, the world over, bear convincing testimony to the excellence of this unjustly decried method, and to its capacity to afford its subjects all the essentials of an education. And these lives show, beyond all possibility of successful contradiction, that, while speech may be a convenience and a comfort to the deaf, *it is by no means a necessity to their highest intellectual, social, and moral development.*

Furthermore, the manual method gives its beneficiaries two invaluable sources of such development, which the pure oral method not only withholds, but most cruelly places under a stigma and a ban as tending by their use to drag the deaf down to the level of the brute. The speaker does not hesitate to express the opinion, formed after many years of intimate association with deaf mutes, educated under all possible conditions, that, as balanced over against the boon of speech and lip-reading, great though it be, the gift to the deaf of the language of signs and the manual alphabet is of far greater value and comfort.

The testimony of supporters of the manual method as to the character and value of the language of signs would, no doubt, be regarded by many as prejudiced, or at least biassed, and will not, for this reason, be offered. But this objection cannot be raised against the opinion of Moritz Hill, of Saxony, easily first among the oral teachers of Germany—a disciple of Heinicke, the founder of the oral method, and for forty years a practical instructor of the deaf. Near the close of his long and useful life, Hill published a treatise giving the results of his experience, and expressing the views he had been led to form.

In speaking of those who pretend that in the "German

method " every species of pantomimic language is proscribed, he says :

Such an idea must be attributed to malevolence or to unpardonable levity. This pretence is contrary to nature, and repugnant to the rules of sound educational science.

If this system were put into execution, the moral life, the intellectual development of the deaf and dumb, would be inhumanly hampered. It would be acting contrary to nature to forbid the deaf-mute a means of expression employed by even hearing and speaking persons. * * * It is nonsense to dream of depriving him of this means until he is in a position to express himself orally. * . * To banish the language of natural signs from the school-room and to limit ourselves to articulation is like employing a gold key which does not fit the lock of the door we would open, and refusing to use the iron one made for it.

At the best it would be drilling the deaf-mute, but not educating him intellectually or morally.

Hill continues at a greater length than can be quoted here, conceding, among other important advantages growing out of the use of the language of signs, that it is—

The element in which the mental life of the deaf-mute begins to germinate and grow : the only means whereby he, on his admission to the school, may express his thoughts, feelings and wishes. * * * An instrument of mental development and substantial instruction, made use of in the intercourse of the pupils with each other: for example, the well-known beneficial influences which result from the association of the new pupils with the more advanced. * * * A most efficacious means of assisting pupils even in the higher degrees of school training, giving light, warmth, animation to spoken language, which for some time after its introduction continues dull and insipid. * * * But it is particularly in the teaching of religion that the language of pantomime plays an important part, especially when it is not only necessary to instruct, but to operate on sentiment and will, either because here this language is indispensable to express the moral state of man, his thoughts, and his actions, or that the word alone *makes too little impression on the eyes of the mute* to produce, without the aid of pantomime, the desired effect in a manner sure and sufficient.

In giving its true value to Hill's noteworthy opinion, thus briefly outlined, it must be remembered that in his school, as in other oral schools where his views prevail, the language of signs is nothing more, to quote his own words, than "a very imperfect natural production, because it remains for the most part abandoned to a limited sphere of haphazard culture." If then, in this crude and undeveloped condition, it serves the important purposes that Hill ascribes to it, of how much greater worth must it be in the manual schools where it has

not been left to "haphazard culture," but has been carefully and scientifically developed for many generations! *

In attempting to judge between the manual method and pure oral (which oralists of Hill's conservative views do not advocate), it must be remembered that the promoters of the latter method—and their numbers are not small to-day—banish from the school-room, and would remove from the school life of the deaf, if they could, that language declared to be necessary and helpful by Hill, and of the greatest dignity and value by the scientists of Zurich.

Of these iconoclastic oralists Arnold, of Riehen, may be taken as a suitable representative.

Arnold says in the *Organ* (1874), the leading German educational journal published in the interest of deaf-mute education, "As long as signs are found to exist in schools for the deaf, so long the entire cause of deaf-mute education will suffer with a cancer which saps the marrow of oral instruction, and thus of all true education;" and to his pupils he says with ceaseless iteration, "You are human beings, and must therefore speak like human beings, and not make grimaces like apes;" and boasts "that by reasoning with his pupils thus, and also by telling them that if they used signs they would be punished, he has succeeded in suppressing the sign-language almost entirely in his school." And a famous general once boasted to the world that "order reigned in Warsaw."

In seeking to determine the relative superiority of the manual and the oral method, were either to be adopted to the exclusion of the other, the results of the practice of the latter under this condition must be reviewed. And this will not prove a difficult task, "our enemies themselves being witnesses."

The most serious criticism which may justly be brought against the *pure* oral method is that it *cannot* be successfully applied to all the deaf. While this is denied by some of its more zealous, not to say bigoted, promoters, it is fully conceded by others equally well qualified to give evidence.

Among the instructors at the Paris Institution, where the *pure* oral method has been given exclusive sway within the last

* President Gallaudet here gives a sketch of the dispute between De l'Épée and Heinicke as to the value and capacity of the language of signs, and the judgment in the case rendered by the Academy of Zurich. See the *Annals*, vol. xii, pages 84-129 E. A. F.

more able or zealous in promoting or
Gogguillot.

valuable treatise on the teaching
in which with admirable candor he rec-
to the universal and exclusive applica-
the following language:

decide that all deaf-mutes can acquire speech
the contrary. The relatives of young
hopes too high, for in that case they must
bitter disillusion. They may hope always,
never.

proceeds to describe certain physical and
among the deaf, which render suc-
impracticable, and adds:

percentage of the cases unable to acquire
may vary in different countries and in different
we do not think we can be accused of
in an institution where deaf-mutes are re-
all the provinces and all social conditions,
at least one-fourth of the school population.

French instructor of eminence, in a re-
the oral method as the best, where
and he regards it as practicable with the
deaf-mutes; but he declares that there are now,
and always will be, a comparatively
cannot derive the least benefit from that
he does not disagree with the Italian
to the *hospice* the children who, *with-*
show sufficient aptness to be retained
where the pure oral method is rigorously
These children receive from a special teacher, by
instruction adapted to their degree of

weighing the testimony of Gogguillot
the former concedes *at least* one-fourth of the
of success under the oral method, imply-
of a larger proportion, and that the latter
method to be practicable with the majority,
that more than a "comparatively small num-
of success.

admissions of the failure of the oral
the deaf come from Germany, the land

where it has held undisputed sway since the days of its establishment by Heinicke one hundred and fifty years ago.

Much excitement has been created within the past three or four years by the publications of Mr. Heidsiek, an instructor of ability and prominence at Breslau, in which the approximate failure of the German or oral method has been freely acknowledged, and in which charges are made of misrepresentation at exhibitions and elsewhere.*

It is not surprising that Heidsiek's views, so derogatory to the *pure* oral method, should be combatted by many of his colleagues in Germany and elsewhere. There are still to be found not a few so carried away by enthusiasm as to argue, as was once urged vehemently by an eminent oralist in conversation with the speaker, "that every instance of failure in attempting to teach a deaf child to speak is to be attributed either to the ignorance or the inefficiency of the teacher."

But Heidsiek is nothing daunted or discouraged by his critics. Convinced of the soundness of his conclusions he continues to express them, and his most recent publication, "The Deaf-Mute's Cry of Distress," issued only a few months since, reiterates all that he had said previously in condemnation of the oral method as the exclusive one to be used.

Wishing to have direct and recent information as to the progress of this most important controversy in Germany, the speaker wrote Mr. Heidsiek a few weeks since, and has just received a full personal letter, together with assurances of agreement from numbers of German teachers of the deaf and from former pupils, and favorable comments from educational journals; all of which indicate that in Germany the days of the exclusive promotion and practice of the oral method of teaching the deaf are numbered, and that in the near future the Combined System will there be recognized and sustained as affording the greatest good to the greatest number.

It would be interesting, did time allow, to give Mr. Heidsiek's recent letter in full, but it will only be possible to include here a few brief quotations.†

Mr. Heidsiek's testimony and that of those who more or less openly sustain his views show clearly that there are very many

* See the *Annals*, vol. xxxii, pp. 104-113; vol. xxxv, pp. 271-275; vol. xxxvi, pp. 145-147.

† Mr. Heidsiek's letter is published in full elsewhere in the present number of the *Annals*.—E. A. F.

deaf-mutes with whom it is worse than useless to spend time on the teaching of speech—with whom, therefore, the pure oral method fails in the great purpose for which it exists. But it is not alone because of the acknowledged inability of many deaf-mutes to learn to speak and read from the lips that the pure oral method deserves to be seriously criticised. For it can be shown that those even who are capable of reasonable success under it fall far short of obtaining the educational advantages they might secure were they allowed the benefit of certain features of the manual method which the pure oralists rigidly condemn and reject. And it has been discovered that the intellectual development of deaf children trained under the oral method compares unfavorably, in many instances, with that of others of no greater mental capacity who have been taught under a judicious combination of the two methods. To the National Institution at Washington, with which the speaker has been long connected, there have come, from time to time, for the purpose of profiting by the advanced courses of study offered there, deaf youth whose earlier training has been conducted in oral schools. Some of them have for the first time at Washington come into a proper understanding of the language of signs, their previous knowledge of which had been limited to the “haphazard culture” spoken of by Hill, or that surreptitious cultivation declared to be inevitable by Heidsiek, and which Arnold of Riehen claims to have succeeded in stamping out by measures that were often cruel. Young persons who had only known under such unfavorable circumstances as these the language which was theirs by nature would find with delight and gratitude, often mingled with keen regret over their lost opportunities, in this means of communication, always previously tabooed and discredited, a source of mental stimulus and development, and of keen pleasure in social intercourse, which nothing else could furnish.

In the single matter of public lectures to a considerable number, including those of a religious character, the language of signs affords a means of clear, vivid, and often eloquent expression, incomparably superior to anything the pure oral method can furnish.

To take this marvellous and most convenient means of communicating thought, so natural and easy to the deaf, wholly out of their life, is to those who know its value, as the pure oralists through their wilful ignorance do not, a piece of folly,

not to say cruelty, that can hardly be spoken of with patience.

And now, if one would compare the results of training the deaf under the two methods, valuable testimony will be found in the annual report of the oldest American school, that at Hartford, Conn., published in 1884, in which the principal gives a table of results in thirty-two cases of his pupils, all of whom had been previously taught in oral schools for periods ranging from six weeks to eleven years.*

Enough has certainly been said to show that the education of all the deaf cannot be effected by the exclusive practice of the pure oral method. That it fails entirely with a large proportion is acknowledged in the land of its birth. That it lacks many important desiderata with the most promising of its subjects has been demonstrated in a country where for nearly thirty years it has been promoted under most favorable conditions. And to its unwarranted, not to say arrogant, demand for complete supremacy, the reply may justly be made, MENE, MENE, TEKEL, UPHARSIN.

The friends of the manual method, while they may properly claim that unaided by any features of the oral method it is capable of affording to the greatest possible proportion of the deaf an education more full and practical than that offered by the other, would by no means exclude oral teaching. Far from this—in America, at least—they unanimously sustain the California resolutions, which admit even the establishment of pure oral schools for such as can be sure of success in them, and urge earnest and reasonably continued efforts to teach every deaf child to speak.

This they believe is all that should be accorded to oral teaching: a place, a proper but always subordinate place, in a broad comprehensive system which accepts the useful features of every method, applying them with skill and candor, and without prejudice, to the varied needs of individuals whose capabilities are marked by even greater diversities than exist in society at large.

For the triumph of these views to which she stands fully committed America invites the co-operation of the mother country, that the moral support of a united Anglo Saxon sentiment may be extended to our brave Teuton colleague, who

* President Gallaudet here quotes from Dr. Job Williams' paper on "A System Adapted to all Deaf-Mutes." See the *Annals*, vol. xxix. pp. 289-300.—E. A. F.

has dared to raise his voice for truth against the heavy odds of established precedent and a not unnatural patriotic prejudice. With such support, it will not be long before the National Congress of Germany will come out openly for a reform that will secure for the Combined System of educating the deaf the world-wide prevalence it deserves. * * *

And now, Mr. President, the duty to the performance of which your Society has invited me is done.

I have endeavored to direct public attention to certain considerations concerning the education of the deaf which my experience and observation lead me to feel are of first importance.

I have tried to show how enthusiasm and prejudice, with the addition, often, of a narrow vanity, masquerading under the name of patriotism, have set up stumbling-blocks and misleading sign-posts in the pathway of progress that ought to be removed.

I have sought to give each method and measure that has heretofore been devised for enlightening the mind or relieving the disability of the deaf-mute its true relative value and place.

If I have discredited and denied what I believe to be the unwarranted claims of some, I have condemned no man's actual beneficent achievements. I have rejected no method. On the contrary, I find good in all; and my counsel is, as you have seen, to lay hold on all, employing each in the office for which it is fitted, securing thus a union which shall give strength, harmony, and an end of all strife.

It was said in proof of the divine beneficence of our Saviour's mission upon the earth: "He hath done all things well, for he made the deaf to hear and the dumb to speak."

Following his benign example, let us in his spirit go forward to the work we have to do, striving with singleness of purpose, and with every means coming to our hands, so to train those whom "the finger of God hath touched" that they may at length, with ears indeed unstopped, hear the welcome, "Well done, good and faithful servant," and with tongues made musical by the proximity of Heaven join in the harmonies of the life that knows no imperfection and no end.*

EDWARD M. GALLAUDET, PH. D., LL. D.

President of the National College, Washington, D. C.

Points which were discussed at some length by President Gallaudet were the advantages of boarding-schools or institutions over day-schools, and the importance of providing for the higher education of the deaf.

THE SITUATION IN GERMANY.*

BRESLAU, *June* 14, 1891.

HIGHLY-HONORED PRESIDENT: In the first place, will you be so good as to accept my most sincere thanks for the several pamphlets, as well as for the friendly lines, which you had the great kindness to send to me. It fills me with satisfaction and confidence to know that such an experienced and prominent member of the profession as you are is an ally on my side.

I read with great interest the account of your journey in 1867, and I assure you, moreover, that, if you should to-day take the same journey again, your judgment upon the methods of carrying on the institutions for deaf-mutes in the Old World would result exactly as before. The deaf-mute institutions would present themselves to you in greater numbers and in more elegant garb, but in the method of instruction you would scarcely discover a difference or progress worthy of mention. "As the old ones sang, so chirp the young ones." It is from the belief in the established order of things, fostering laziness of thought and saving trouble, that the German method of instructing the deaf suffers. Incapacity hides itself under a cloak which falsely goes by the name of patriotism. Mr. Renz, of Stuttgart, who is surely not unknown to you, in the April number of the *Organ*, calls it a plain want of conscience when a German teacher of the deaf expresses his own opinion in regard to the principles of methods; in the opinion of Mr. Renz it is the duty of every German teacher of the deaf "to work for the development and improvement of the German method." It is thought to be treason to the Fatherland, a lack of patriotism, and an attack upon the mighty German empire, if one dares to turn aside a hair's breadth from the old customs, if one so much as questions the correctness of the pure oral method. The pure oral method is German; the sign-method, on the contrary, is French, foreign, unpatriotic. But, in my opinion, the question, Which method of instruction is to be employed in order to afford to the deaf-mute the best possible training? is not the proper ground for proving one's patriotic inclinations. Whence the method comes and what name it bears is of no importance; it is, however, for the in-

* A letter addressed to President E. M. Gallaudet, Washington, D. C.
Translated by Miss Grace W. Gallaudet.

terest of the poor deaf-mute that we teachers should use in our instruction those means which are adapted to the nature of those with only four senses, and which surely lead to the goal.

The results of the German method rest, for the most part, on appearances. It makes an overpowering impression upon the layman when he hears from the mouth of the deaf-mute a few intelligible words; but of what use is this artificial work to the life of one deprived of hearing if he is without the most scanty knowledge, and is not able also to make himself understood in the least in writing?

The German school at present lays the whole stress upon articulation; with unspeakable tortures the effort is made to force the deaf to speak in pleasant tones, and to read from the lips what is spoken; and in this scarcely any progress is noticeable. Out of a hundred deaf-mutes there are not five who could take part in a conversation with hearing people, whose speech could be understood, and who would be able to read from the lips with accuracy.

If, however, the supporters of the German method are satisfied with their results, if they look back with contempt upon the earlier teachers of the deaf, and live in the belief that they have gone far ahead of these older teachers, it is because they compare the articulation of their present pupils with the speech of such deaf-mutes as left the institutions several years ago. For what to-day pleases us in our pupils fills us in a few years with horror; for that which distinguishes the younger generation from the old is as fleeting as the splendor of the rose. After a year and a day the articulation of the deaf-mute who to-day leaves the institution is just as unintelligible and repulsive as that of the older deaf-mute. The supporters of the pure articulation method will, to be sure, not make this concession, but the truth of my assertion will not be disputed by any unprejudiced judge.

Hill, the greatest teacher of deaf-mutes in the Old World, spoke at the end of his life of "the new German school." Now we speak of the "modern" German deaf-mute school, and, as long as it lasts, we think we have found the newest and most modern method of all.

In this we get not a step forward. The means of instruction become ever more superficial, more shallow, more full of pain to the deaf-mute. All education and training of value are wanting in the instruction. It degenerates continually into a lifeless, mechanical drill.

You can easily imagine that my energetic endeavors are very uncomfortable to the supporters of the pure oral method, and that I am to them a thorn in the flesh. It is indeed a bold thing to rest simply on the truth; upon him who undertakes to do this are poured suspicions, and against him rise from all sides open and concealed enemies. In spite of this I do not stand wholly alone in my opinions. There are a great number of teachers of deaf-mutes in Germany who share my views entirely, but they lack the courage to testify publicly for the truth. As Nicodemus came secretly to the Lord in the night, even so have renowned members of the profession come to me with the remark, "You are quite right, but one must not say so!" The wasps' nest into which I have struck has been accustomed for many years to absolute repose, and therefore the effect of my ruthless attack is the more complete.

There was great boasting over the victory that the pure oral method is said to have gained at the International Congress at Milan, and now it is proved that the transactions of that assembly formed only the preliminaries to a passing truce, at the termination of which the decisive blows must fall. In this hot contest most of those in the profession take an expectant position; in order not to burn their fingers, they remain in a passive state, restricting themselves at best to furnishing me with a moral support in the struggle, as you will observe, for example, from the enclosed letter from four teachers in another German institution.* But even for such expressions I am deeply thankful to my dear colleagues.

I am supported more vigorously by the deaf-mutes, by the

* JUNE 13, 1890.

DEAR COLLEAGUE: The study of your work, "The Deaf-Mute and his Language," has so delighted us that we cannot deny ourselves the privilege of expressing to you our sincere thanks and our full acknowledgment of it.

You have given a sure and comprehensible form to that which has occupied our minds for a long time, and we believe that we surely do not say too much when we add that your work will be of great help to every teacher of deaf-mutes who is honest and free from prejudice, and of great blessing to our pupils.

Continue to fight quietly and persistently for the good cause, and then, according to our innermost conviction, will the result at last be on your side.

In this mind do we send you our best congratulations and our heartiest fraternal greeting.

[Signed by four teachers of the Institution at ———, Germany.]

The Situation in Germany.

by the deaf schools, and by educated laymen. The deaf societies give me their complete support and consent which will, in my opinion, be of great service. In order to assure you how much I am attached to my endeavors, I will enclose herewith a letter from a former pupil of this institution. I trust that you can gain further information from the enclosed letters.

The deaf-blind person who, in order to prove the utility of the method, makes use, as examples, of a few deaf-blind persons who are in the happy position of being able to devote themselves wholly to making further progress in their studies who are not dependent on the work of others. This is a consequence of their fortunate social position and the opportunity of using articulation and writing. The great majority of the deaf, however, are dependent on some manual labor. They have no opportunity of learning the art, gained at so much pains, is, therefore, almost wholly lost to them, so that they are content exclusively on gestures and writing.

Should you do me the honor of reading my works it is unnecessary for me to say anything more at this time upon the subject. If you should do me the honor of recommending them in an American publication, I should be very much obliged if you would be so good as to recommend them and would kindly send me a printed copy of the same.

With expressions of the highest esteem, your most
obedient servant,

J. HEIDSIEK.

Your works are entirely at your disposal.

THE ENGLISH COLLEGE OF TEACHERS.

A MOVEMENT has been set afoot in London, which has received support in other parts of the kingdom, for the purpose of making some recognition of the valuable services rendered by Drs. Stamer and Elliott in founding the College of Teachers of the Deaf and Dumb.

The College, which as yet is only an examining college, was established in 1885 with one aim, viz., to raise the standing of the teachers, but with several praiseworthy means of obtaining that aim, foremost amongst which was to test the ability of candidates in the theory and practice of the work, and to grant certificates to those who proved themselves competent teachers. In this respect very much has been done to give the teachers of the deaf in Great Britain a standing amongst educationists, and in other respects the College has performed work which more mature institutions of the kind might be highly pleased to accomplish.

During the six years of its existence 103 candidates have been examined, and 75 of these have obtained the College certificate, it numbers in all 135 members.

Young teachers show their appreciation of the value of the certificate by presenting themselves in numbers year by year for examination. Committees and head-masters of institutions and managers of schools recognize its importance by giving preference to candidates for higher positions who possess such a testimonial of merit over those who do not.

Previous to 1885, the teachers of the deaf in England were as isolated a class as the one which they were engaged in raising out of the depths of neglect and solitude; their hard working services were greatly underpaid and their liberty was cut down to the verge of oppression. The worthy founders of the College, by their timely action, aimed the death blow at this pernicious condition. They knew that but few privileges had been doled out to them in their younger days, and they knew, furthermore, that much the same state of things would continue to exist did some one not act; they perceived very little hope of their co-workers ever enjoying the benefits that were being extended to other members of the teaching profession unless something were done to stir public interest, and to exhibit the latent power which they had reason to believe the

rising generation of teachers possessed and which only waited an opportunity to assert itself. In short, they anticipated a brighter future for their successors and for the deaf. They were not misled by their convictions, for no sooner was the tender root planted in the ground than it budded and blossomed, and to-day its fruits are prolific. A more opportune moment for action could not have been; readier hearts could not have acted; "Progress" has been their motto since, and progress has been their reward.

The testimonials are to take the form of two oil paintings of themselves. Dr. Stainer's portrait has been painted by Mr. Thomas Davidson, the well-known deaf-mute artist of "Ephphatha" fame, and but for Dr. Elliott's indisposition the pair would have been completed in time for presentation at the Annual Meeting of the College in July, as announced by the circulars issued. The disappointment has been great to all concerned; but the delay gives those members who have not yet responded an opportunity of doing so before the time of presentation is fixed.

P. DODDS,
Honorary Secretary, London, England.

THE COLUMBIAN EXPOSITION.

I wish to suggest the desirability of making at the Chicago Exposition in 1893 an exposition of the school work of the State institutions, and of the productions of the adult deaf, mental, artistic, mechanical, architectural, etc., as an illustration of what has been achieved in the line of deaf-mute education in our country within seventy-five years.

Yesterday, while visiting at the Nebraska Institute, I asked Superintendent Gillespie if such an exposition had been proposed. He replied that he did not know, and added, "The Convention ought to have taken the matter up." He further said: "If there is any exhibition of deaf-mute work, probably each institution will prefer to exhibit in its own State department." While that plan of exhibiting would be most convenient and cheapest, perhaps, the work, however creditable to each individual State school, would never attract so much notice nor make so forcible an impression as it would if combined in a special national department, where each insti-

tution might have its own special State department, the National College to be the crowning glory of all.

My heart swells with class pride and deep gratitude to God for the blessing of deaf-mute education, as in my mind I glance over the exhibit that can be made, if the subject is promptly and efficiently taken in hand by the many institution papers, the several missionaries and evangelists, the deaf-mute societies, clubs, etc., and the superintendents. Let every adult deaf person who is a skilled worker be appealed to for a contribution of whatever article, useful or artistic, he can make excellently well, or whatever invention he has patented. Let the editors arrange files of their institution papers, and the printing done in their offices this year and next. Let each institution plan its own exhibit as early as possible this year, thereby insuring ample time to complete all creditably.

It seems a thousand pities to let pass unimproved so grand an opportunity for pleading the cause of the deaf with those foreign visitors in whose country schools for the deaf either do not exist or are poorly conducted.

Another consideration worth weighing is, that while such an exposition as the schools can easily make will win merited honors for the noble-souled people already consecrated to the work of deaf-mute teaching, it will serve to attract to their ranks some persons of superior natural capabilities who otherwise would probably never have deemed the work worthy their notice. Judging from the fine display of industrial work made at the commencement exercises of the Nebraska School for the Deaf last spring, this Institution will make an exhibit in some niche of the great Fair that will compare very favorably with any school of its age in the world. It is said that Dr. Gillett will establish a branch of the Illinois Institution at the Exposition. Proud though I am of my adopted and native State, I hope the other schools will not allow Illinois and Nebraska to claim all the honors of a cause so fraught with importance to humanity. Surely it is not unreasonable to believe that, if such an exposition is given, among the many thousands of people who will view the exhibits an astonished awakening to the possibilities connected with the education of the deaf will be wrought. Confidence in their ability as workers will be inspired to such a degree that they will more readily obtain employment, while such a kindly sympathy will be induced in many previously unappreciative that hands unused to the for-

274 *First Summer Meeting of the American Association.*

mation of finger letters or sign-language will grow expert thereat, thereby adding to the business facilities as well as the social enjoyment of the class.

Another far-reaching result will be that the lamentation of the poet—

Uncared for, unpitied, he wanders alone,
A creature of God, forsaken, unknown,

which so graphically describes the condition of an uneducated adult deaf-mute, will be less frequently applicable than now, because fewer deaf children will be allowed to grow up without education in our highly-favored country.

ANGELINE FULLER FISCHER,
Omaha, Nebraska.

FIRST SUMMER MEETING OF THE AMERICAN ASSOCIATION.

THAT which we call the American Association to Promote the Teaching of Speech to the Deaf by any other name would be equally redolent of good works, perhaps, but it would be difficult to invent another title, less cumbrous, that would as aptly indicate the aim and purpose of that organization. The members of this Association have recently met in conference at Crosbyside Hotel, on the shores of Lake George, and the purpose of this article is to give some account of their proceedings and of the impressions produced upon one who went there with little enthusiasm for the work of articulation, but determined to free his mind, so far as possible, from all prejudice, and to draw conclusions solely from the merits of the case.

It was quite evident to even the earliest arrivals that there was to be no small gathering of the clans, and that those in attendance were not all by any means to be from the ranks of the pure oralists. As indicative of this fact it may be noted that the oldest Institution in the country was represented by her principal and an instructor from the manual department: one of the professors from the National Deaf-Mute College, an instructor from the New York Institution, a deaf teacher from the Kendall School, and several teachers and instructors from the manual department of the Philadelphia Institution were there. But, as was to be expected, the largest number came from that detachment of our army whose special line of work is articulation. It is quite likely that some of the leaders in

this movement went there with doubts as to whether the meeting would be a success in the matter of attendance; doubtless others questioned whether it would be a success, whatever the attendance might be; but there was and there could be but one verdict upon such points, and that was reached by those present before the evidence was all in. One thing at least is manifest to all, and that is, that it is possible to draw together a goodly number of teachers of the deaf for consultation and mutual profit without offering the inducement of free board at an institution. The roll-call of members at the opening session was responded to by about eighty-five persons, and this number was increased soon after, by the arrival of belated delegates and the addition of new members, to one hundred and twenty-five or thereabout. There were also many visitors present at the daily sessions from the hotels and cottages around the lake.

The printed program of this "First Summer Meeting" was not very rigidly adhered to, and it is not the purpose in this article to follow the order of proceedings as it was carried out, but rather to give a general outline and summary of the work done. In his opening address the President of the Association, Professor Bell, said that statistics taken from the *Annals* show that there has been a gradual increase during the past few years in the number of deaf pupils who are taught speech, but that still nearly sixty per cent. of children under instruction in the year 1890-'91 received no lessons whatever in articulation. He emphasized as the work of this Association the reduction of that per cent. It is not the aim of the Association to advocate or to oppose any special system of instruction, but simply to meet upon the platform indicated in the resolution which was adopted at the California Convention in 1886—that *every deaf child should be afforded an opportunity to learn to speak*. In a later address Dr. Bell gave utterance to an expression which might be construed, without much distortion, to imply an approval of the use of signs in instructing the deaf. To quote his exact words, as nearly as they can be recalled, he said: "Use any means to impart to the child a command of language. Use the manual alphabet or any other means to secure that end." The general sentiment, however, was not that of cordial admiration for the language of signs, and when one exponent of that method took the floor with a rather aggressive air he was jocularly admonished by the Presi-

matter, as "we know" and the reminder prob-
 expression of opinion.
 this that there was a dispo-
 was simply a determination
 proper channel, and to eliminat-
 useless and unprofitable argu-
 pressed the controversies at our
 the relative importance of the
 recognize the wisdom of avoid-
 times. Still, the knowledge that
 who would carry away wrong
 made it very hard on certain oc-
 the manual system was maligned,
 as when, for instance, the Hon.
 his address on the Education
 adjacent prediction that twenty-five
 "sign-language" will no longer be
 the deaf. Such a statement was
 spirit advocated by the President
 it certainly indicated amazing con-
 speaker in his prophetic vision, in
 were persons in his audience better
 decide from prosaic experience whether
 either probable or desirable.
 met for profit and not for wrangling.
 lectures in the mornings, school of
 including actual work with pupils
 entertainment in the evenings. Dr. A.
 Medical College, Philadelphia, delivered
 anatomy of the vocal organs, fully illus-
 charts, models, and specimens from
 He was listened to with the closest at-
 was sufficiently free from technical
 understood by his audience, and while he
 style, with no attempt at display, he
 familiar with his subject, and presented
 and instructive way that it was prob-
 a majority of those present that these
 were ample repayment for all the trouble
 at the Summer Meeting.
 each morning. Professor Bell gave

an hour to the vocal organs, visible speech, and kindred topics. However much one may differ with Dr. Bell upon any of his theories, it is impossible to withhold admiration of his ability as a lecturer. "He is a born teacher," said one gentleman at the conclusion of one of these lessons. It would require too much space to give any abstract of these lectures that would in any degree do them justice, but a few of the illustrations used may be noted, though much of their force and aptness is necessarily lost by thus separating them from the connected discourse. He compared the power which exists in a chord of producing sympathetic vibrations in another chord to a child pushing a swing. When the pushes agree with the motion of the swing, increased vibration results; when not in agreement, the motion is checked. So a chord produces vibrations in another chord harmonizing with itself, but tends to check the motion of chords which do not harmonize. The application was the strengthening of the vocal sound by the resonance cavities, the air in which vibrates in harmony with the vocal chords.

In proof of the assertion that all the variations of the human voice that go to make up speech, even to the vowel sounds, are due to modifications of the sound in the resonance chambers of the mouth and nose, he cited an instance which came under his notice where a man, a native of Scotland, had undergone the operation of tracheotomy and was yet able to carry on an intelligible conversation, even the Scotch accent being noticeable. No air came through the vocal chords, as at that time they had been closed for twenty-five years. There was of course no voice, but only something resembling a whisper produced by violent expulsion of the air from the back of the mouth through the lips.

When a pupil has defective speech, the teacher should imitate it, and by studying the position of the vocal organs in his own mouth learn just where the defective utterance is caused in the pupil's mouth. We do not always get the sound we want from a pupil, but we get something, and we should study that sound and use it instead of adopting the "No, no," method.

Dr. Bell characterized the indefinite vowel sound as a perfect "godsend" to the teacher of articulation. He deprecated the great waste of time which some teachers are guilty of in attempting to secure a nicety of utterance on the part of

deaf pupils that is not observed even by hearing people in ordinary conversation. Nobody says *wahs* (for was), but rather *wuz*. We are not training elocutionists, but are simply endeavoring to give our pupils the power to make themselves understood, and we should be satisfied when we accomplish that. He then pronounced quite a long sentence, giving to each vowel this indefinite *u* sound, but there was no difficulty in understanding each word.*

The advantages of using the manipulator in the pupil's mouth were shown by calling up some of the deaf children present to the rostrum. Starting with the *t* sound, Professor Bell successively produced the *ch* and *k* sounds by pushing the tip of the tongue back into the mouth. So also the *n* sound was converted into the *ng* sound.

In order to secure continuity of speech and to prevent the "bagpipe" variety of articulation (in gasps, or with pauses intervening between the elements of a word), he emphasized the necessity of having the sounds or elements overlap. In pronouncing the word "play" the *l* should not succeed the *p*, but the tongue should be in position for the second consonant at the same time that the lips are closed to form the first one. Several of these devices—which he characterized as "dodges"—were suggested by him and their practical value is evident.

At one of the morning sessions Mr. Edmund Lyon gave an exposition of his "Phonetic Manual." This Manual has been in use during the past year in the Rochester School, and Mr. Westervelt and Miss Hamilton both spoke highly in praise of it. It is to be issued in printed form by the Association as Circular of Information No. 2, fully illustrated with engravings. As an evidence of the labor and expense that the author has assumed in preparing the Manual, it may be noted that nearly six hundred photographs were taken "in order to obtain uniformity in the representation of the positions * * * for the engraver to work from." Special importance is attached not to its rapidity but to the fact that it is a *phonetic* manual. In his prefatory remarks Mr. Lyon says: "So perfectly adapted was the hand found to represent the functions of the vocal organs that some mysterious relation between the two seemed to exist." The casual reader might perhaps be dis-

* Of course on this point and many others there was much diversity of opinion, many, if not most, of those present, advocating and practising a thorough drill on the vowel sounds.

ed to regard this statement as simply the superficial and
coifful opinion of an enthusiast, but it would appear from the
itings of medical authorities to have foundation in sober
ct. I remember reading some years ago in the *Popular*
Science Monthly an article on Cerebral Localization, in the
urse of which the writer stated that the nerve centres which
ontrol the muscles of the face and those of the arms are so
lose together in the brain as to appear as one, and that this
act is illustrated by the grimaces that accompany vigorous
use of the arms. Mr. Westervelt remarked that the pupils, in
making use of the phonetic symbols, were observed to be un-
consciously accompanying them with the positions of the
mouth which the symbols represent.

Among the vast mass of valuable and practical matter pre-
sented by teachers in the afternoon school of practice it is
hard to make special reference or comment. Most of the pa-
pers presented were illustrated by pupils from the schools—a
style of illustration that requires no commendation. There
were about two dozen deaf children in attendance, coming from
as far east as Portland, as far south as St. Augustine, and as
far west as Milwaukee and Kansas City. The school of prac-
tice was in charge of Miss Yale, as indicated on the program
which was sent out a short time previous to the meeting.
The exercises were of informal character, the speakers often
being plied with questions, except in those few cases where an
elaborately-prepared paper was read, and even then the reader
was always subjected to subsequent cross-examination by the
audience. The illustration of the kindergarten methods by
Miss Gawith, of Northampton, was especially interesting.
With the aid of some children whom she met there for the first
time, she was able to show how the interest of such beginners
is held until they are unconsciously led on from play to study.
Miss Fuller gave some account of the Sarah Fuller Home, but
none of the "little children" were present. Miss Black, with
pupils from her Albany Home School, demonstrated the excel-
lent results which she has secured by means of the "syllabic
drill," already described by her in the *Annals*, vol. xxxv, pages
118-124. Miss Jordan, of the Horace Mann School, after read-
ing a paper on the word method, called two of her pupils for-
ward and had them give a short exhibition of their proficiency
in the use of speech and of their ability to read the lips. Miss
McDowell, in describing the methods of the Philadelphia Oral

Branch, laid special emphasis upon the importance of having the spoken word precede the written form in order that the pupil may be impressed with the fact that he must depend on the former. The articulation work of the two girls from this school was remarkable and excited much comment. Mr. Paul Binner, of the Wisconsin Phonological Institute, presented some charts of vocal gymnastics used in his Milwaukee day-school, and, with the aid of two of his pupils, illustrated various breathing exercises. Miss Sparrow, of Northampton, Miss Barton, and other teachers, were accompanied by pupils from their respective schools. The methods of the Whipple School were described by one of Mr. Whipple's former pupils, Miss Daisy Way, of Kansas City. If all of the pupils of that school were as expert in articulation as this young lady is, the superiority of that method would require no further demonstration than to hear them speak and see them read the speech of others. Miss Way holds a position in a large business house where there are seventy employés. All communication with her is carried on by word of mouth, and as she keeps the books of the establishment, it is, of course, necessary for her to transact much business that requires speech. Her attendance at this meeting, coming as she did all the way from Kansas City, to describe the methods and to testify to the earnestness and zeal of her former teacher, was, as Dr. Gillett remarked, "a most beautiful tribute to his memory."

The books and apparatus from Northampton, Portland, Boston, Rochester, and the Volta Bureau constituted an exhibit that attracted much attention.

Such is a very incomplete, imperfect account of a most important gathering. It would be difficult to write a satisfactory report of the proceedings: the printed report from the stenographer's notes will fail in many ways to indicate exactly what took place. Actual attendance at the daily sessions alone can qualify one to judge of the merits or demerits of such a convention.

I have reserved mention till now of my personal convictions respecting the value of articulation and the place that in my opinion it properly occupies in our work. These convictions have been strengthened in some respects and modified in others by what I saw and heard at Lake George. I am more than ever convinced that every deaf child should have an opportunity to learn to speak: I am quite as positive that all deaf chil-

dren cannot be taught to speak, and that to persist in the effort to secure that end is as great an injustice to the pupils in some cases as it would be to deprive them of fair trial in the oral department in the first place. Our oral friends unduly magnify the value of speech *as it is attained by the majority of the deaf*, and they also exaggerate the malevolent influence of signs. The pupil whose speech and lip-reading created the most favorable impression on the platform at Crosbyside surprised me one day by mingling readily in a sign conversation which I was holding with Mr. Kiesel. I will admit that she showed a proper appreciation of her awful condition, for when I asked in surprise how it was that she could use signs so fluently, she replied orally, "The older girls taught me; I am ashamed of them!" The horror which the pure oralists affect over the grimaces of sign-makers is rather amusing in view of the mouthing, throttling, manipulating processes which are necessary in oral instruction. The standpoint of æsthetics is one on which the teachers of speech can hardly claim a monopoly. But this is a digression; I started out to say that only imperfect and more or less disagreeable speech is attainable, and even that is limited to exceptional cases. In conversing with the best of the articulation pupils present at Lake George, it was necessary for me to pay close attention to catch what they said, and it was frequently impossible for them to understand what I said to them. The ability to converse as well as they did had unquestionably been secured at the expense of some general information which could have been imparted by means of signs without materially delaying their progress in articulation. "The greatest good to the greatest number" is a very good motto in our work of teaching the deaf.

So much for that side of the case. On the other hand, it must be noted that some of our manual teachers are just as oblivious to the necessity of teaching speech to the deaf as are the pure oralists to the undoubted advantages of the combined or eclectic system. No teacher, and certainly no principal, can afford to ignore or refuse to consider systems whose results are open to inspection and whose success is manifest to any candid observer. The oralist errs in claiming too much; the ultra sign teacher errs no less in conceding too little. One of the most important papers presented at Lake George was Mr. Crouter's on "The History of Oral Work in the Pennsylvania Institution." In that Institution "for fifty years no other

method [besides the manual] was practised, no other was believed possible." When such a conservative school slowly but surely turns to other methods until the principal, who was for many years a teacher in the manual department, declares "The time for doubt is gone and gone forever. Speech, God-given speech, is the heritage of every child, and every child should be afforded the opportunity, the very best opportunity, to acquire it," there is food for reflection in the declaration. It is not the experience of the Pennsylvania Institution alone: most of the foremost schools for the deaf have come to recognize the importance of articulation. The change offers but few attractions to the manual teacher. It is like being transferred from the lightning express to a construction train. But our personal dislikes have nothing to do with it. The parents wish their children "to be like other children," and we should make them as nearly so as lies in our power. The tax-payer supports our institutions under the supposition that we are best fitting our pupils for mingling with the world, and no candid person can study the situation carefully without admitting the great advantage which even imperfect speech gives to the deaf. It means more work for us, more disagreeable work, and less satisfactory results. We can stand the labor, but the prospect is not the less discouraging. Meanwhile let us neglect no opportunity to inform ourselves concerning oral methods, and the first step to take in that direction is to become a member of the American Association to Promote the Teaching of Speech to the Deaf.

WM. A. CALDWELL, M. A.,
Principal of the Florida Institute, St. Augustine, Fla.

THE WHIPPLE METHOD.*

OTHER able articles which have been read before this meeting have mentioned numerous instances in the history of the development of articulation in which a system of teaching the deaf has virtually ceased to exist with the death of the originator. There seems to have been an unfortunate series of circumstances, if not an organized effort, to keep in obscurity the Natural Alphabet and system of teaching of the late Mr. Zerah C. Whipple, of Mystic River, Connecticut, and while as a pupil of his, a direct beneficiary of his achievements, I feel profoundly grateful for the opportunity offered me to bring the matter before the public, and thus contribute a trifle toward securing it a portion of the attention it so richly deserves, I am deeply conscious of my own inability to do the subject adequate justice, and I would first of all beg for kind consideration of the facts I plead in extenuation.

A period of some sixteen years has elapsed since I received instruction, and during this time, as no necessity has required me to retain all the facts ready for immediate use, as would have been the case had I been a teacher, there are doubtless many details which may be lacking, and which I am unable to supply. I am but too glad for the occasion thus offered me of doing honor to a benefactor of humanity whose sole aim was to benefit those who are afflicted, and, incomplete as my explanation may be, it is actuated by a deep feeling of gratitude and a full consciousness of what I owe to him. I am glad to say that I have with me my mother, who is as familiar with his methods as I, from the fact of her residence at the school with me, and if in the course of discussion any questions arise which I am unable to answer I shall be glad to refer you to her.

So little is known of the system that a brief history of its origin may not be amiss.

Primarily, the germ developed in the mind of Jonathan Whipple, the grandfather of the inventor, whose favorite son, Enoch, was a deaf-mute. By dint of perseverance and repeated experiment, wholly unaided by precedent or device, he succeeded in teaching his child a form of speech. Afterward he

* Read before the meeting of the American Association to Promote the Teaching of Speech to the Deaf, at Lake George, New York, 1891.

discovered, by close study of the subject, that he could secure an understanding from him more readily when his own face was under close scrutiny, and thus to his mind was imparted, remotely enough, but still impressively, the first principle of lip-reading, which he afterwards taught his son, and which resulted in his becoming an accomplished speech-reader. The elder Whipple was ignorant and obscure, and had no possible knowledge of the other efforts then being made in the same direction, but the idea took a firm hold upon him, and he longed to extend the benefits to a wider circle of the afflicted class to which his son belonged. His methods were primitive; prejudice was strong and difficult to overcome, and as old age drew on apace, despairing of his ability to carry on his cherished hope, he confided his ambitions to his young and gifted grandson, whose ready brain was as quick to conceive as his compassion and humanity were swift to be aroused, and he adopted as his life work the task of teaching the deaf to speak and read the lips. His ideas were necessarily crude and undeveloped; but, aided by his grandfather's example, he sought for and obtained a few pupils, whom he endeavored to teach as his uncle had been taught. This was largely in the nature of an experiment, and he soon felt the incompleteness of his theories, which he at once redoubled his efforts to strengthen. He resigned his charge to other members of the family and sought instruction in the Connecticut State Normal School, believing that a course of study would result in a more thorough understanding of the details of teaching. One day, so the story goes, he saw the principal and abruptly announced his intention of at once going home, saying in explanation that he had at last conceived an idea of a system whereby the formation of sounds could be illustrated, and he anxiously desired to reach home in order to experiment upon and perfect his idea. That very day witnessed his departure, and, after weeks of patient study and concentrated mental effort, his labors resulted in the formation of the "Natural Alphabet," also known as Visible Speech.

The idea he conceived was simply this: if the visible vocal organs were familiarized to the pupil, each in the proper position for forming sounds, one great point in articulation was gained. He aimed to reach the understanding by the shortest possible route—to appeal directly to the mind of the pupil by a picture of the positions taken in making speech. He en-

deavored to illustrate in the simplest manner the positions of the teeth, lips, tongue, and palate. In point of fact, his invention differed from the Bell system in this principal detail, that instead of depicting the organs of the throat and conveying the anatomy of sound, he confined himself wholly to the representation of the organs visible only to the *naked eye*. The process which evolved the idea began with the profile representation of the human head, and having gained a condensed form of illustration of each of the components of Visible Speech, the next step was to perfect them. For hours at a time he sat before a mirror studying the positions of the organs of the mouth, or going out into the bright sunlight he would lie upon his back, still with the mirror in his hand, peering into the inner recesses of his mouth. While studying the more difficult sounds he neither ate nor slept, and yielded only to exhaustion when the obstacle had been conquered. He threw his whole vitality into the task, and its completion virtually ended his existence. His idea was based upon the necessity of the utmost simplicity in the manner of reaching the mind of the pupil. Laying aside the idea of teaching a set of arbitrary sounds, each representing a position of the inner mechanism of speech, he endeavored to convey to the eye at once both the sound to be produced and the position required in its formation. This obviated the necessity of teaching the pupil the relationship between the characters of the alphabet and vocalization, and constant drill in writing and reading the characters familiarized the vocal organs with the function of placing themselves properly. If the idea were adequately understood, it would seem that a great obstacle in the education of deaf adults would be removed. As I have said before, no attention whatever was paid to the organism of the throat, and the entire idea of sound was conveyed through the vibration felt by placing the hand upon the throat and nose, and holding it before the mouth in the case of respiratory sound. I am glad to be able to refer to a set of charts prepared by Mr. Whipple himself for my use and home instruction. The fact of their having been prepared by him adds greatly to their value and renders them more interesting, I am sure. These represent much of the elementary steps in the teaching of the system.*

* We hope to be able to publish these charts in a future number of the *Annals*.—E. A. F.

In regard to Mr. Whipple's system of teaching there are many details which it is difficult for me to supply. Virtually he had no organized plan. His whole mind was bent upon the duty of perfecting his alphabet for so long a period, and after its completion his demise followed so swiftly, that no time was left for the elaboration of the details of teaching. The school was all that the name implied, a *Home* school, where all were members of one family and each day was one long object-lesson. Beginning with the simplest sounds known, after the idea of possessing a voice and the ability to use it was thoroughly ingrafted upon the mind of the pupil, the method of teaching was almost identical with that shown by Dr. Bell in his demonstration with the younger children. Mr. Whipple went among the pupils and played with them, so that at first work was disguised under the mask of a pastime. At the table, in their play, and during constant intercourse with them, efforts were made to teach the children the names of familiar objects and conditions that came under their notice, and, instead of a routine of duty, untiring attention was given them, and individual instruction was the rule rather than by classes. The Natural Alphabet representation of each word learned was first correctly mastered, and as rapidly as possible sentences followed, and conversation was immediately begun. Extensive drills were given in writing, in Natural Alphabet characters, long lists of words, and from these exercises pronunciation was corrected, and the meaning and usages of the words themselves were thoroughly explained.

Mr. Whipple achieved wonderful success in the instruction of older pupils. At one time his pupils included several graduates from sign institutions, who made very rapid progress. His method with them, after conveying the principles of speech, was confined to extensive drills in translating exercises of Natural Alphabet characters into writing, and of transferring printed articles, familiar poems, or scriptural passages into the Natural Alphabet form. Their previous knowledge of the usage of words aided them greatly, and the process of study required gave them a thorough and definite idea of pronunciation.

In each instance of adult teaching wonderful progress was made. Two children of a wealthy Southern gentleman, both graduates of a Canadian institution, and each over twenty-five years of age, made particularly rapid progress, and the effect of their first word upon their father, who, at eighty years,

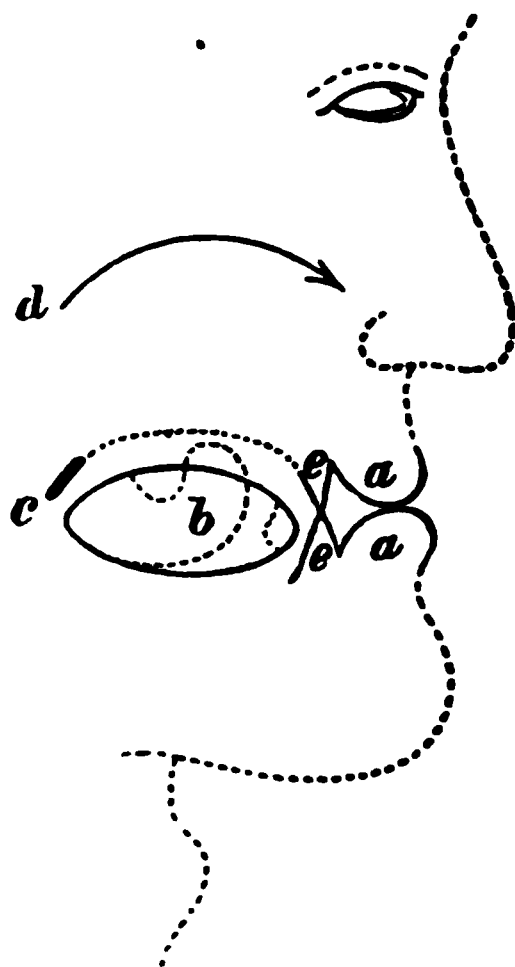
heard for the first time the sound of their voices, was pathetic in the extreme. He came in midwinter from his home in Louisiana to satisfy himself, and went away delighted. The idea is gaining ground that only the younger deaf can be properly instructed in articulation, and some schools have decided against the admission of older pupils. For the benefit of the latter, in view of the fact of past successes, it would seem that this system is at least worthy of a trial in their behalf. The drill in reading and writing the symbols so familiarizes the visible organs with their proper use that speech-reading quickly follows the art of speaking itself.

It is but tardy justice that brings the life-work of Mr. Whipple into some degree of prominence among the records of the education of the deaf. History is forever repeating itself, and in time there may be developments which will lead to its lending to a sorely afflicted class the aid that the inventor so earnestly desired to bestow. He believed this to be his mission, and to fulfil it properly every energy was bent. In a letter to my father written during my stay at the school, he said: "I am thankful, my dear sir, that I have been one of those selected by the Father to accomplish a work so full of blessed results." Failure never caused him to falter; he was beset and harassed by financial difficulties that no doubt exhausted his already overstrained vitality and hastened his end. While he has never yet been duly appreciated, it is not impossible that a future generation may rise up to bless both him and the invention that was his life-work and the guiding star of his existence.

DAISY WAY,

Kansas City, Mo.

WHIPPLE'S NATURAL ALPHABET.*



* From a letter addressed to Professor B. G. Northrop and published in the report of the Connecticut Board of Education for 1873.

By referring to the diagram at the bottom of the chart, it will be seen that *a a* represent the lips; *e e* the teeth; *b* the tongue; *c* the soft palate, and *d* the direction which the voice takes in passing through the nose. A curved line drawn over a character means "voice through the nose."

The letters of "Whipple's Natural Alphabet" above the dotted line are parts of the diagram, pictorial of the organs of speech placed in certain relative positions, such as would be assumed by those organs in speaking the required sound. In other words, each letter of this alphabet is a reminder to the person who sees it to put certain parts of the mouth in certain positions relative to each other, in order to produce a certain elementary sound of the language.

The following is a description of each letter referred to by its number on the chart:

No. 1. Lips closed; voice through the nose. *m*, as in *sum*.

No. 2. Lips closed; voice in the mouth, followed by a puff of breath. *b*, as in *tub*.

No. 3. Lips closed; puff of breath. *p*, as in *cap*.

No. 4. End of the tongue pressed tightly against the upper teeth and gum; voice through nose. *n*, as in *man*.

No. 5. End of the tongue pressed against the upper teeth and gum, entirely stopping the escape of the voice; the voice sounded in the mouth, followed by a puff of breath. *d*, as in *pad*.

No. 6. The tongue in the same position as No. 5. A puff of breath without any voice. *t*, as in *put*.

No. 7. The throat closed by contact of the back of the tongue with the soft palate; voice through the nose. *ng*, as in *thing*.

No. 8. Same position as in No. 7, excepting that the nasal passage is closed and the voice is confined to the throat. As the throat is opened by lowering the tongue, the confined breath will be heard to escape quite forcibly into the mouth. *g*, as in *bag*.

No. 9. Same as No. 8, omitting the voice. *k*, as in *sack*.

No. 10. End of the tongue between the teeth. Voice and breath combined. *th*, as in *bathe*.

No. 11. Same as No. 10, excepting the voice. *th*, as in *bath*.

No. 12. Under lip drawn under the upper teeth. Voice and breath combined. *v*, as in *move*.

No. 13. Same as above, omitting voice. *f*, as in *half*.

No. 14. Teeth closed; tongue in contact with the teeth at the sides, but slightly drawn back at the point. Voice and breath combined. *z*, as in *haze*; *s*, as in *wise*.

No. 15. Same as No. 14, omitting the voice. *s*, as in *less*, *hiss*.

No. 16. Lips separated about the width of a finger; teeth slightly separated; tongue touching the teeth at the sides, but drawn back from the front teeth, leaving a larger place for the escape of the voice and breath than in Numbers 14 and 15. Voice and breath combined. *s*, as in *pleasure*, *measure*.

No. 17. Same as No. 16, omitting the voice. *sh*, as in *fish*.

No. 18. Combination of numbers 5 and 16.

No. 19. Combination of numbers 6 and 17.

No. 20. Point of tongue touching the upper teeth and gum: voice forced out at the sides of the tongue. *l*, as in *ell*, *hill*.

No. 21. End of the tongue turned backward; voice. *r*, as in *fur*.

No. 22. The throat open; breath. *h*, as in *behalf*.

No. 23. The lips pouting, forming a round aperture; breath. *wh*, as in *where*.

The letters thus far described all show a side view of the organs of speech. And the aspirates and vocals are distinguished from each other by the lines in the former being light, and in the latter darkly shaded; as, for instance: Numbers 2 and 3 are alike, excepting that No. 2 is shaded, which signifies "voice," while the light lines of No. 3 mean that the breath only is used.

The remaining letters from 24 to 41 inclusive are the vowel sounds, and they are intended to show, by a front view, the degree of openness of the mouth and the shape of the orifice necessary to produce any given sound. It is not claimed that this portion of the alphabet is in every particular scientifically correct, for it does not follow that by placing the lips in a given position a required sound *must* be produced; but it is claimed that these are the *natural* shapes and positions which a deaf person must be taught to look for and expect when these sounds are uttered. Though it is true that every one of our English vowel sounds can be pronounced with tolerable distinctness with closed teeth and without moving the lips at all, still it will be acknowledged by all that that is not the correct way to talk.

In the vowels the difference in the shading represents the distinction between "long" and "short."

Numbers 24, 25, and 26 show the difference in the size of the aperture between the lips in speaking *oo*, in *boot*; *oo*, in *foot*; and *o*, in *over*.

No. 27 is a combination of numbers 26 and 25.

No. 28 shows the mouth opened widely. The horizontal lines represent the upper and lower teeth. *au*, *a*, as in *all*.

No. 29 shows the comparative size of the aperture for the escape of the voice between the tongue and the teeth in speaking the long sound of *e*, as in *eel*.

No. 30 shows the opening to be slightly enlarged, while the light lines signify a short sound. *i*, as in *if*, *pin*.

No. 31 shows the tongue entirely parted from the teeth in front, but still touching at the sides. *ē*, as in *met*.

No. 32 shows the tongue dropped from the teeth at the sides, and lying nearly flat in the mouth. *ā* as in *fat*, *hat*.

No. 33 shows the tongue rather narrower than in No. 32, and also further from the teeth. *ah*, *alms*.

No. 34 shows the tongue farther still from the upper teeth, and more contracted in width. *ō*, in *on*, *sot*, *folly*.

No. 35 shows the upper and lower teeth, but the tongue is drawn so far back toward the throat and lies so flat in the mouth that practically it is not visible to the pupil standing in front of the teacher. *ū*, as in *us*, *up*; *o*, as in *come*.

No. 36 represents a rather indistinct, almost indefinable sound, heard in the last syllable of *human*, as it sounds in ordinary speech. A sort of intermediate between numbers 32 and 35.

No. 37. A combination of numbers 29, 30, and 25, pronounced with one impulse of the voice. *u*, in *use*, *youth*.

No. 38. A combination between numbers 33 and 25. *ou*, as in *out*.

No. 39. A combination of numbers 28 and 30. *oy*, as in *boy*.

No. 40. Numbers 31 and 30 combined. *a*, in *ate*, *mail*.

No. 41. Numbers 33 and 29 combined. *i*, as in *ice*.

ZERAH C. WHIPPLE,

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THE QUESTION OF METHODS IN SWEDEN.

Two years ago there was published at Stockholm an official pamphlet of 90 quarto pages entitled *Författningar m. m. angående döfstumundervisningen* (Documents, etc., relating to Deaf-Mute Instruction). Stockholm: Ivar Hægeström, 1889.

This pamphlet contains the law relating to deaf-mute instruction passed May 31, 1889; announcement by the king of the general subjects to be taught in the schools for the deaf; announcement in regard to appropriations of public money for the schools; extracts from the records of the ecclesiastic department; extracts from a communication from the Riksdag or Parliament, and statistical tables.

To outsiders the most interesting part of the pamphlet is the extract from the records of the ecclesiastical department. This takes the form of a report to the king as to the various inquiries that have been made into the matter of deaf-mute instruction, and the various arguments *pro* and *con* on different subjects, all of which are briefly summarized, and the conclusions lucidly set forth, together with recommendations.

What renders this report the more valuable is the fact that it is made by Mr. G. Wennerberg, the chief of the ecclesiastical department, an officer corresponding to our cabinet officers, who has charge of matters pertaining to religion and education. Not only is he eminently qualified by education and position to discuss the subject, but, on account of his clear and logical reasoning, his sound judgment, and, above all, his absolute impartiality and freedom from bias of any kind, his conclusions are entitled to careful consideration by intelligent and thinking men of all factions. While he covers the whole ground in a most admirable manner, the part of most interest to us is that relating to methods of instruction. Although Sweden was not unaffected by the oral wave which swept over Europe about the time of the Milan Convention, it was not wholly carried away by it; and it is therefore the more interesting to note its position on this point.

In 1878 a royal commission was appointed to inquire into the subject, and, after their report had been made, the matter was discussed in the professional papers for nearly ten years, and various memorials were presented to the government. These discussions and memorials are given due consideration in the final report and recommendations.

After commenting on the peculiar situation of the deaf and the necessity for special instruction, the three different methods—sign, writing with finger-spelling, and oral—are treated separately. As to signs, it is conceded that they are the easiest and most natural means of reaching the minds of the deaf; but on the other hand that they are conducive to loose thinking and incorrect use of language. The writing-spelling method, it is said, leads to a more correct use of language.

The following is what Mr. Wennerberg says about the oral method:

The highest aim of deaf-mute instruction is the introduction of the deaf to our language by means of the oral method, since speech is the chief medium of communication between man and man. One must not, however, in the efforts to teach the deaf to speak, overlook the manifest difficulties thereby encountered; while by the sign and writing methods the deaf child receives impressions of the language from the motions of the hands and fingers, in the oral method it is from the rapidly vanishing lines formed by the mouth of the speaker that the eye of the deaf, aided by an instructive interpretation of the speaker's facial expression, must discover the spoken word. When afterwards the deaf-mute tries to repeat the word, he receives no guidance from his ear as to the sound of the word he speaks. Through sight, and to some extent with the aid of feeling, the pupil must first find out how the teacher's lips and muscles work together, in order to denote an object by a word silent to the pupil. Guided by his feeling, the pupil must afterwards place his organs of voice in the same position as those of the teacher in order to produce the same word. Learning to speak, which to the hearing comes without effort, is to the deaf an art so great that it is a wonder any can learn it at all. Notwithstanding the enormous difficulties encountered in the work, the efforts of experienced teachers in this direction do, in many cases, lead to the desired results.

No wonder that this success gives rise to an enthusiastic desire to return a greater and greater number of the deaf to the community as speaking beings. I fully appreciate the value of speech, and concur in the recommendations of the committee that all the deaf should first be given a trial by the oral method in order that, if found capable, they may be instructed by this method. But to me it seems clear that for not a small proportion of the deaf speech and lip-reading present most serious difficulties, and that, on account of the large amount of merely mechanical work necessary in oral instruction, the intellectual development, which is possible even for the less intelligent deaf by adopting a method more suitable for them, is in many cases liable to be sacrificed. And, to be sure, one does not do the deaf-mute any service if, in order to teach him to speak a few words, one sacrifices his intellectual development in other respects.

In this connection, I take the liberty to touch upon a question which

has been much discussed. It is now pretty generally conceded that not a small number of the deaf, particularly those of less intelligence can never obtain any considerable proficiency in speech and lip-reading. But opinions still differ considerably as to the proportion of those who can be thus taught. While one member of the royal commission thought that about 80 per cent of the deaf could be instructed orally, the majority of the commission considered 60 per cent. to be all that could be successfully instructed in this way, and there are experienced educators who place the figure even lower. It is evident that this percentage will vary according to the ability of the teachers and the organization of the school. But another point must be considered in determining the question, namely, What is a satisfactory result in oral instruction? It is often complained that the speech of the deaf is repulsive, and unintelligible to most people, and it is also argued that many deaf can read the lips of only certain persons with whom they are familiar. The greater or less importance attached to these things will also affect the so-called percentage question.

But whichever of the three methods is used, the importance of writing must always be insisted upon. To be sure, writing is somewhat inconvenient, but one thing is certain, that it is generally understood by intelligent people. And in teaching the deaf as well as the hearing, writing in connection with reading is in many cases, a more potent factor for developing the intellect than speech.

Passing to the question as to which method will give the best result in different cases, we find that the question is looked upon from two essentially different points of view. On the one hand the pure oralists argue the unquestionable superiority of speech as a *means of communication*, and think that the chief aim of deaf-mute instruction should be to attain some proficiency in speech and lip-reading, even though the former be chiefly mechanical and of small compass. On the other hand the opponents of this method claim that *mental development* is the chief aim, and that speech should be a secondary matter. According to the latter view, each of the three methods has its place, one for one class of the deaf, the other for others. They argue that there is no reason for confining the schools to any one system, but that the choice should be left open. If the pupil is not capable of reasonable development by the oral method both mentally and as regards speech and lip-reading, he should be instructed by the method which promises the next best result as to mental development, namely, the writing-spelling method; and only in case his mental capacity is so deficient that he cannot be successfully taught by this method should he be assigned to instruction by the sign method. * * *

During the ten years which have passed since the commission made report some experience has been gained in regard to the instruction of the deaf, both in separate schools for the different methods and where two or more methods have been employed in the same school. As far as we know, no decidedly superior results have been attained by the former arrangement, nor has oral instruction suffered materially by the latter. In foreign countries, as among us, it has been observed that the inability of the deaf to hear what they themselves as well as others say has caused

rather than to fall into certain errors and bad habits of speech, and therefore attention has been called to the necessity of exercising special control over them when talking with one another. I am also aware that some of those in our country who have been most eager in advocating absolute separation have modified their views considerably. Notwithstanding all this, it must be admitted that sufficient information has not yet been obtained to determine whether or not separate schools will not be necessary in order that the oral method may attain the highest development of which it is capable. This applies particularly to separating oral schools from those in which signs are used. In my judgment this question should for the present be left open, and the various school districts allowed to decide it for themselves, provided that, if instruction is given by different methods in the same school, care must be taken that oral instruction does not suffer by this arrangement.

The law passed in 1889 contains provisions substantially in accordance with these recommendations.

O. HANSON, M. A.,
Minneapolis, Minn.

NOTICES OF PUBLICATIONS.

CAPPELLI, D. LUIGI. *Due Commedie per istituti di educazione.* [Two Comedies for Educational Institutions.] Siena: S. Bernardino. 1891. 12mo, pp. 54.

These comedies were written by a teacher in the Siena Institution, to be given on the stage orally by deaf pupils, and have been so given by the pupils of the Siena and other Italian schools. Mr. Cappelli claims for them no other merit than that they are adapted to the purpose for which they were intended; but to have achieved that successfully is in itself no slight merit.

FERRERI, G., and MORBIDI, E. *Esercizi graduati di lettura pei sordomuti italiani. I Parte.* 2d Edizione migliorata. [Graduated Exercises in Reading for Italian Deaf-Mutes. Part I. Second Edition, improved.] Siena: S. Bernardino. 1891. 12mo, pp. 95.

The third part of this series, by two teachers of the Siena Institution, was noticed in the *Annals*, vol. xxxiv, page 216. This first part begins with combinations of sounds and single words grouped progressively, and proceeds as far as short sentences used in conversation. A large vocabulary of nouns classified by subjects (parts of the body, articles of clothing, etc.), a few adjectives and verbs, some familiar forms of speech, and numeration up to a hundred, are included.

GREENBERGER, DAVID. The Word-Method (Circular of Information, No. 1, 1891, of the American Association to Promote the Teaching of Speech to the Deaf). Washington, D. C.: Gibson Brothers. 1891. 8vo, pp. 18.

The term "Word-Method" is here used as opposed to the "A-B-C-method" of teaching articulation. New pupils are taught to utter words from the outset instead of beginning with single elementary sounds. The words to be taught, however, are not chosen at haphazard, but are carefully selected with a view to render the task simple and to include the most important combinations of sounds. Writing is taught independently of speech, but speech always precedes writing. All instruction in language is given orally, and the written form is not shown until the pupil has become familiar with the spoken form by weeks of practice. The reading of printed matter is deferred until the pupil has been in school for two years or longer. The results of thus giving the spoken word the precedence are, Mr. Greenberger maintains, a more correct pronunciation by the pupil, better lip-reading, and the more speedy formation of the habit of thinking in spoken words. Some of the psychological principles upon which the theory is based are applicable to language teaching in general, so that, while this able treatise relates especially to the teaching of articulation, it may be read with profit by instructors of the deaf by other methods. It will certainly be read with interest by all.

HODGSON, EDWIN ALLAN, M. A. Facts, Anecdotes, and Poetry relating to the Deaf and Dumb. New York: Deaf-Mutes' Journal Print. 1891. 12mo, pp. 225.

This volume begins with an interesting chapter, showing how some deaf persons have distinguished themselves as scholars, sculptors, painters, writers, teachers, and men of business, and giving some facts relating to the education of the deaf. The anecdotes and poems which follow Mr. Hodgson has compiled from his fifteen years' experience as editor of the *Deaf-Mutes' Journal*. Some of the pieces possess high poetic merit, and all of them have the special interest that belongs to their subject.

WEED, GEORGE L. Great Truths Simply Told for Young Learners in Christian Teachings and Young Readers of Bible Words.

This book is not yet published, but it is expected to appear during the present month. We have seen some of the advance sheets, and we call attention to it now in the belief that heads

of schools will be glad to know of it before they order new books for the year just opening.

Mr. Weed, now of the Pennsylvania Institution, is especially fitted to prepare such a book as this by his long experience as a teacher of the deaf, and by the special interest that he has always taken in their religious instruction. The topics include the nature and attributes of God, our duties to God and one another, the life and teachings of Jesus Christ, an introduction to the reading and study of the Bible, condensed forms of religious service (prayers and responsive services), and a catechism on the Lord's prayer. The language, the illustrations, and the development of thought are of the simplest and clearest character, so that, notwithstanding the difficulty of some parts of the subject, the book is well adapted to the comprehension of deaf children. It is unsectarian to the extent that its doctrines are those in which the evangelical sects are generally agreed; but there are some paragraphs to which parents belonging to other denominations might reasonably object, and which in our judgment might better be omitted for that reason. Its religious spirit and practical teachings are excellent, and it is because we approve of the book so highly in most respects that we should like to see removed every possible objection to its introduction into our public schools for the deaf.

E. A. F.

ROSING, HEDEVIG. *En liden religionsbog til skolebrug* [A Little Book on Religion for the Use of Schools.] Kristiania: 1890. 8vo, pp. 48.

As its name implies, this is a little book for religious instruction. It treats of the attributes of God, the ten commandments, the apostolic creed, the Lord's prayer, baptism, confirmation, and holy communion. Notes are added both to explain the subjects and to interest the pupil, and the whole is written in simple language suited to the comprehension of the deaf.

O. H.

MANN, REV. A. W. *Fifteenth Annual Report of Church Work among the Deaf in the Mid-Western Dioceses, from July 1, 1889, to July 1, 1890.* 8vo, pp. 17.

PROCEEDINGS of the Thirteenth Convention of the Empire State Association of Deaf-Mutes, held at Buffalo, New York, August 19-20, 1890. Rome, N. Y.: Printed and bound at the Rome Register Office. 1891 8vo, pp. 43.

REPORTS OF SCHOOLS, 1890: Ontario, New South Wales; 1891: American, Birmingham, Central New York, Christiania, Genoa, Liverpool, Llandaff, Mackay, Manchester, Pennsylvania Oral, Ulster, West Virginia, Western New York.

SCHOOL ITEMS.

Alabama Institute.—Miss Kate H. Fish has resigned the position of articulation teacher to accept a similar position in the Columbia Institution. She is succeeded by Miss Lois Atwood, of Columbus, Ohio, who has had no experience, but has been thoroughly trained. She is the daughter of Mr. R. H. Atwood, of the Ohio Institution. Miss Mabry, one of the manual teachers, was not reappointed and the vacancy has not yet been filled.

The building for the colored deaf and blind is expected to be ready for use on the first of January next.

Albany Home School.—Miss Black writes :

Ned C. Groesbeck, a pupil of this school, has received a diploma from the Round Lake Sunday-School Assembly for passing the examination in the boys' and girls' class. The class was composed of about sixty children from seven to eleven years of age. The examination was written and consisted of nearly one hundred questions, covering the history and geography of the Bible. Twenty-one children passed the examination, of whom Ned was the only one who answered all the questions correctly and had a perfect report. He learned the lessons by copying them from the black-board and by study and oral instruction outside of the class, as the teacher spoke so rapidly and changed her position so often that he was able to get but little from her lips by speech-reading.

American Asylum.—Miss Alice S. Williams has retired from the articulation department, and Miss Elizabeth Fay has been added to it.

Arkansas Institute.—Miss Grace Beattie has been added to the corps of instructors. Miss Beattie had taught for a year in this school formerly, and had left to finish her education at the Little Rock High School.

Colorado School.—Mrs. Anna Richards has retired from the matronship and is succeeded by Mrs. E. A. McWhorter, wife of the late Mr. J. A. McWhorter. Miss L. K. Thompson has retired from the position of teacher of articulation and is succeeded by Miss Ada R. King, for twelve years connected with the Hartford Asylum in the same work, having been at the head

of the Articulation Department in that school for eight years Mr. J. A. Tillinghast, son of Mr. D. R. Tillinghast, of the North Carolina Institution, has been elected to the position of teacher in this School, but will first spend a year in the National College, having received one of the fellowships recently established there. During this time his place will be filled by Mr. S. W. Gilbert, for two years in the Missouri School. Miss Margaret Taylor, who taught four years in the Royal Academy for the Blind in London, and who has been with the Illinois School for the Blind for the past two years, has been appointed teacher of kindergarten, taking a class of deaf children a part of the day and a class of blind children the other part. Mr. H. M. Harbert, long connected with the School, has resigned his position in the literary department to devote all his time to the printing-office work.

A handsome new iron fence has been put up around the premises, and a large bake-oven set up. A hospital is in process of erection which will cost \$3,500. The total amount for them all will be about \$6,000. New laundry machinery has also been ordered at a cost of \$1,250. The new school house has been furnished with new desks, and the assembly hall with new chairs.

Clarke Institution.—We are glad to be able to announce that Miss Fletcher, who has been absent for a year, has now returned to the work.

Cross School.—The important school to be established at Preston, England (*Annals*, xxxvi, 88–91), has been named “The Cross Deaf and Dumb School for North and East Lancashire,” in recognition of the generosity of Miss Cross, of Myerscough, who placed in the hands of the trustees \$25,000 for the purpose of establishing and endowing the School, on condition that a further sum of \$12,500 be raised for the same purpose. The additional sum required has been subscribed. The system of instruction adopted for the School was described in the last January number of the *Annals*, page 91. It will be gratifying to many of our readers to know that this system was adopted, primarily, in consequence of President Gallaudet’s evidence before the Royal Commission. Mr. J. G. Shaw, of the Committee of the School, in a report to the Committee recently published, says :

Dr. Edward Gallaudet was probably the strongest of all the witnesses who appeared before the Royal Commission a few years ago to speak in favor of the combined system ; and it is worthy of note that, despite the extreme pressure—moral, social, and financial—brought to bear by the pure oralists to change the whole course of deaf-mute instruction in this country, the first new school for the deaf and dumb to be founded since the elaborate investigation promoted by the English government, the one at Preston, is to be established, with the full approval of the most eminent English experts, on the lines laid down by our American cousins.

Deaf-Mute Department, University of Deseret.—Miss Grace S. Zorbaugh, teacher of articulation in the Nebraska School last year, will fill a like position here this year. This is a new department, no regular work in articulation having been done heretofore. Miss Mary Kilpatrick resigned her position at the close of last year to accept a position in the Minnesota School. Mr. Frank M. Driggs, for two years past boys' supervisor and a University student, has been appointed to fill the vacancy.

Florida Institute.—Miss Sophia Macmillan has resigned her position as teacher of articulation, and accepted a similar position in the Western Pennsylvania Institution. Mrs. Rosa Keeler, from the New Jersey Institution, and Miss Olive Hart, from the Western New York Institution, have been appointed teachers of articulation. Miss Oakley Bockée, formerly assistant matron, has been appointed teacher in the manual department. Miss Mary Whitaker, of Bridgeton, N. J., takes the place made vacant by Miss Bockée's promotion. In the negro department, Miss Josephine Smallwood, a graduate of the Illinois Institution, has been appointed supervisor. The purpose hereafter will be to have every deaf child taught to speak, if possible. All will receive lessons in articulation, and the beginners will be taught exclusively by that method until it becomes evident that greater progress can be made by a transfer to the manual department, where instruction in speech will not be discontinued, but will be supplemented by manual instruction.

Georgia Institution.—Mr. Connor writes :

We are just completing a steam laundry, also an extension of our water-works. We had a little fire in October last which came near being a very serious affair. As it was, we succeeded in stopping it at a loss of about five hundred dollars. When I went before the Legislature for

money for fire protection we secured everything we wanted, so we shall soon be elegantly fitted up with everything necessary to fight fire or to aid in running from it.

Illinois Institution.—Miss Flora L. Noyes and Miss Frances Filson have resigned their positions as teachers. Miss Helen L. Palmer, late of the Michigan School, has been added to the corps, and Miss Helen Wait is transferred to the articulation department. Mr. Oscar Vaught, having resigned the position of supervisor to accept a fellowship in the National College, is succeeded by Mr. E. W. Heiss. Miss Della Barto, late supervisor, has been appointed assistant matron in place of Miss Murphy, resigned, and is succeeded by Miss Hattie Barto.

Halifax Institution.—Mr. Fearson, of Birmingham, England, who has had thirteen years experience at Belfast, Margate, and Birmingham, has been appointed principal. Miss L. A. Foley has resigned her position as teacher.

Kansas Institution.—On account of ill health Mrs. M. E. Thompson, a faithful teacher, resigned at the close of the term. Miss Eva Owen, also a teacher for several years, resigned, and has since married Mr. Harvey Comp, of the Nebraska Institute. Mr. Charles L. Zorbaugh resigned to study for the ministry. Mr. Cecil Rupert Watson resigned to take the position of teacher in the Minnesota School. Miss Fannie I. Brock, a teacher of articulation, resigned to take a similar position in the Maryland School. Mr. B. O. Sprague resigned to resume farming on a place of his own in Ohio. To fill the vacancies the following appointments have been made: J. H. Brown, M. D., an experienced teacher formerly connected with the Ontario and Western Pennsylvania Institutions; Mr. E. E. Clippinger, formerly a teacher in the Wisconsin School; Miss Cora E. Coe, an experienced teacher from the Indiana Institution; Mr. J. W. Thomas, formerly supervisor at this Institution; Miss Bessie Capper, formerly superintendent's clerk at this Institution. The place of Miss Brock is filled by the appointment of Miss Inez Townsend, a finished elocutionist. The work is progressing on the \$9,000 industrial building to be finished on or before December 15, 1891. This will place the industrial department in a satisfactory condition.

A successful Teachers' Institute was held at the Institution

September 3d to 5th, inclusive. Mr. Walker expresses the opinion, after an experience of four such Institutes, that there are no better means than they afford for placing the teaching corps, superintendent and all, in a condition ready for the best kind of school work. He wonders that the other institutions have not discovered their valuable influence.

Llandaff School.—Mr. Alexander Melville, founder of this School, and its head from the time of its establishment in 1862 until his death, died on the 18th of April last. He was formerly connected with the Doncaster and Cambrian Institutions, and at one time carried on the work of the Royal Association for the Adult Deaf and Dumb in London. He was an earnest, faithful worker, seeking always the welfare of his pupils rather than gain or honor for himself. For the support of his School he depended upon his own resources and the voluntary contributions of the benevolent, and declined to receive a salary. However we may differ from his views as to the best way to maintain a school for the deaf, we cannot fail to honor his integrity, unselfishness, and devotion.

Maryland School.—Miss Fannie I. Brock, of the Kansas School, has been appointed to the vacancy caused by the resignation of Miss Mary McGuire, one of the teachers of articulation. The vacancy caused by the resignation of Miss M. L. Shugh, for several years matron, has been filled by the appointment of Mrs. Rebecca L. Rinehart.

Maryland Colored Institution.—Mr. James S. Wells, for twelve years past a teacher in this school, died July 6, 1891. Mr. Wells was a graduate of the New York Institution. He formerly taught in the Texas Institution, and afterwards conducted an evening school in New York city. In addition to his duties in the Maryland School he acted as lay reader and pastor for the adult deaf of Baltimore connected with Grace Church. He was a man of amiable character and courteous manners, conscientious and self sacrificing in his work, and beloved by all with whom he came in contact.

Minnesota School.—Mr. George Layton, who has been a valued assistant teacher since March, 1887, at the close of last

term declined a reappointment in order to accept a position in the Washington School at Vancouver.

The \$50,000 appropriated by the last Legislature for a boys' dormitory has enabled the Board of Directors to go forward in this much-desired improvement. The contract has been let, and the building is now well under way, according to the excellent plans and specifications of the architect, E. P. Bassford, Esq., of St. Paul. It is hoped and fully expected that it will be completed and furnished ready for occupancy by the time the next term opens in September, 1892. This new building is designed to accommodate 150 boys; one-half of it for the smaller or primary class of boys, and the other half for the larger or grammar and advanced grades. It will be two stories above the basement, nearly fire-proof in construction, and thoroughly equipped with an excellent system of steam-heating, both direct and indirect, well ventilated, well supplied with bath-rooms and closets, and lighted with electric lights, making, it is believed, one of the best designed and best arranged dormitory buildings for the deaf in this country.

National College.—Professor Gordon will take charge of the new Department of Articulation in the College, being relieved for the present year of his recitations in mathematics by Mr. Ely, one of the Normal Fellows. He will be assisted by Miss Mary T. G. Gordon, who has taught articulation in the Kendall School for many years, and by Miss Kate H. Fish, lately an instructor of articulation in the Alabama Institution, formerly engaged in the Maryland School and earlier in the Clarke Institution.

The six Normal Fellowships established by the Directors last March are filled by the following men: Charles R. Ely, of Frederick, Md., B. A., Yale University, 1891; George R. Hare, of Kalamazoo, Mich., B. A., Amherst College, 1890; Oscar Vaught, of Jacksonville, Ill., B. A., De Pauw University, 1887, M. A., 1890; Guy M. Wilcox, of Northfield, Minn., B. A., Carleton College, 1891; Joseph A. Tillinghast, of Raleigh, N. C., B. S., Davidson College, 1891; Wirt A. Scott, of Eccles, Miss., B. A., University of Mississippi, 1891. Mr. Ely is a son of Mr. C. W. Ely, Principal of the Maryland School; Mr. Vaught has for some time filled the position of supervisor in the Illinois Institution, and Mr. Tillinghast is a son of Mr. D. R. Tilling-

hast, for many years an instructor in the North Carolina Institution.

Miss Annie E. Jameson, of Woburn, Mass., will be connected with the Normal Department as a student. Miss Jameson is a graduate of the Boston High School, has pursued a post-graduate course in the same School, and has had two year experience as an oral teacher of the deaf in private families and in the Sarah Fuller Home for Little Children.

The College and the Kendall School sustained a serious loss in the death, July 17, 1891, of Robert C. Fox, LL. D., for several years past secretary of the Board of Directors of the Columbia Institution. Dr. Fox was especially interested in the Institution from being the son-in-law of Amos Kendall, its founder, and in the collegiate department from having formerly himself been a College tutor. He was untiring in his devotion to the welfare of the Institution, never, we believe, having been absent from a meeting of the Board of Directors since his connection with it, nor from any of the public exercises of the College or School until last summer, when his failing health compelled him to leave the city a few days before the closing exercises occurred.

New Jersey Institution.—Mrs. Rose Keeler, teacher of articulation, has resigned the position to go to the Florida Institution.

North Carolina School.—Mr. E. McK. Goodwin, Advisory Superintendent of the new school to be established at Morganton, N. C., writes as follows :

In June, a committee of three from the Board of Directors, accompanied by the Advisory Superintendent, made a tour of some of the leading institutions in the North, to inspect buildings and appliances. The Committee attended the meeting at Lake George and were highly pleased. After inspecting several institutions, the Committee recommended to the Board the construction of a building after the general plan of the advanced Department of the Pennsylvania Institution. At a recent meeting of the Board the plans submitted by Mr. A. G. Bauer, of Raleigh, were adopted. The main building will be 254 feet long, three stories above the basement, built of brick, pressed-brick front, and will accommodate two hundred children. A primary department will be erected to accommodate one hundred children, as soon as practicable. Brick laying will not begin till early in the spring.

The location is a beautiful one, in a large oak grove, thirteen hundred feet above the level of the sea. The school has a farm of two hundred

and thirteen acres. There is a fine mineral spring on the property, about two hundred yards from the front of the building. School will not open till 1893.

North Dakota School.—The Board of Trustees have awarded the contract for plans, etc., for the new building to Mr. O. Hanson, a graduate of the Minnesota School and National College. Plans were submitted by eight well-known architects, but the Board voted unanimously in favor of Mr. Hanson's.

Northern New York Institution.—Miss Mattie Rockwell, of Lawrenceville, N. Y., has been appointed supervisor of the girls. Edward C. Rider has received the appointment of supervisor of the boys, but continues to teach a class as heretofore. Harley W. Nutting resumes his duties as a teacher.

The industrial building for which the last Legislature appropriated \$7,000 is expected to be ready at no distant day.

Ohio Institution.—Miss Blanche Filler and Miss Nina Lesquereux have resigned their positions as teachers to be married. Their places are filled by Miss Louisa K. Thompson, a teacher here from 1867 until 1884, since then a teacher in the Illinois and Colorado Institutions, and by Mr. Luther Louthan, boys' supervisor here last year, formerly a teacher of high standing in the common schools. Miss Loretta Kinney has resigned to accept a position in the Texas School. Her place is filled by Miss Grace Rose, who last year taught in the Western Pennsylvania Institution. She is a daughter of Mrs. Helen Rose, for many years past the matron of this Institution. Mr. Clarence W. Charles, a graduate of this Institution and of the National College, who had been teaching here two years, has resigned to go into newspaper work. His place is filled by the appointment of Miss Mary Bancroft, who was a visitors' attendant last year. She is a graduate of one of the best high schools in Ohio. All teachers appointed this year were required to file certificates of qualification to teach in the public schools of Ohio. Mr. Lewis Flenniken, an *employé* of this institution from 1870 until 1884, the last ten years of which he was boys' supervisor, which position he has held since 1884, first in the Western Pennsylvania and last in the

California Institution, has been reappointed boys' supervisor. His father was the first pupil to enter this Institution.

A volume of 77 octavo pages has recently been published by the Institution containing the full ten years' course of study here pursued, prepared by Mr. Robert Patterson, Principal of the School, and a manual for the teachers, giving the rules of government, prepared by Mr. James W. Knott, Superintendent. Both are worthy of careful study by the heads and teachers of all schools for the deaf.

Pennsylvania Home School.—The "Home for the Training in Speech of Deaf Children Before They are of School Age," in order to establish which Miss Emma Garrett resigned her position as principal of the Oral School at Scranton, has received an appropriation of \$15,000 from the State Legislature for the necessary buildings. The Building Commission consists of the Governor, Lieutenant-Governor, Auditor General, Miss Mary S. Garrett, and S. Edwin Megargee, Esq.

Rhode Island School.—Miss Emma F. Dunlop resigned her position as teacher at the close of the school year in June, and Miss S. E. Littlefield, late of the Western Pennsylvania Institution and formerly of Dr. Bell's School, was appointed to fill the vacancy. An appropriation of fifty thousand dollars for new buildings was made by the last Legislature.

Tennessee School.—Miss Helen A. Ferguson, who has served the institution for the past six years as teacher of articulation with great acceptability, has resigned, and is succeeded by Miss Rilla L. Parker, who has had a private school in St. Louis. The Institution is erecting a ten-thousand-dollar library and school-room building.

Texas School.—Miss Alline Kyle is succeeded by Miss Luetta Kinney, late of the Ohio Institution. Miss Kinney's father was formerly principal of this School.

The accommodations of the School have been considerably increased by raising the main building and the wings one additional story in height.

Mackay Institution.—Miss Dora Langeway, who has had experience in the public schools, has been added to the corps of instruction.

Virginia Institution.—Miss Fanny D. Shackleford, teacher of the fifth class, resigned at the close of last session and was married, June 9, to Mr. Robert E. Lee Chiles, of Richmond, Va., a graduate of the school. The vacancy in this class will be filled by the Board of Directors at its meeting, October 15. Mr. Frank Bell Yates, teacher of the second class, was married June 16 to Miss Blanche Wriggle, of Augusta county, Va.

Washington State School.—Mr. George Layton, of the Minnesota School, has been appointed teacher.

The rear annex to the main building, containing chapel, main dining-hall, kitchen, bakery, and store-rooms, is rapidly nearing completion. Forty thousand dollars is the estimated cost of this addition. Contracts have recently been signed for the placing of a rapid passenger elevator in the main building and for a complete system of iron fire-escape galleries on the rear of the first three stories. City water has been introduced; an electric storage battery of forty cells has been connected with the dynamo, to furnish a number of night lights throughout the building.

The building for the accommodation of the department for the feeble-minded is being roofed in, and will be completed about the first of the year. It is located three-quarters of a mile from the building for the deaf, and although both are under the same management, the households will be distinctly separate.

A department for the blind has been added this term, and for the present they will occupy quarters with the deaf, until increased numbers warrant the erection of a building for their especial use.

West Virginia Institution.—Miss M. H. Keller, of Romney, West Virginia, has been elected to fill the vacancy caused by the resignation of Miss L. A. Kern.

The buildings are being enlarged at a probable cost of \$14,000, giving the Institution greatly increased accommodations.

Western Pennsylvania Institution.—Mr. Allabough, who has been supervisor for several years, was given a place as

teacher on the opening of school. His place was filled by the appointment of Mr. Frank Leitner. Miss Grace Rose has returned to the Ohio Institution, where she will teach this year. She has been succeeded by Miss Frances Barker, formerly of the Ohio, more recently of the Kentucky Institution. Miss May Williams has retired from the work. Miss S. E. Littlefield, articulation teacher, has gone to Providence, R. I., and her place has been filled by the selection of Miss Sophia Macmillan, of the Florida School.

Wisconsin School.—Miss Agnes Steinke, of Horicon, Wis., an experienced public-school teacher, has been appointed to fill the vacancy caused by the resignation of Miss Elizabeth G. Bright, and Miss Ruth Swiler is teaching Miss A. I. Hobart's class *pro tem.* during her absence in Europe and in visiting Eastern schools. Mr. W. F. Passage is now foreman of the printing office, succeeding Mr. Pratt. Mr. O. W. Blanchard has resigned as boys' supervisor and Mr. Thomas Hagerty and Mr. Clarence Wright have succeeded him.

The School is now under the supervision of the new "State Board of Control." The Board is composed of six men, who have control of all the State Institutions, visiting them in turn, and auditing all their accounts at a monthly meeting held at their office in the city of Madison. Two of the most valuable and experienced members of the old State Board were appointed on this Board.

MISCELLANEOUS.

An Institution at Shanghai.—Dr. G. O. Fay, of the Hartford Institution, sends us the following :

Missionary relations in China have given me information recently of the founding of an institution at Shanghai for the education of Chinese deaf-mutes. For two years the subject has been carefully canvassed by educated residents, Chinese and foreign, and an organization effected, with a published constitution and plan of operations. The enterprise is at present in the hands of a committee of gentlemen, eight of them Chinese and six of them English-speaking residents. H. C. Hodges, M. A., is the president of this committee, and John Walter, Esq., General Manager of the Shanghai Bank, treasurer. A substantial preliminary endowment of \$30,000 is desired. The necessary opening expenses for land, buildings, and furniture, with a beginning attendance of twenty pupils, are estimated at \$5,000. A manager in chief from America or Europe is desired,

with native assistants in the teaching of language and of trades. As elements of "a general school education, Christian and secular," it is designed to teach deaf-mutes "to speak, read, write, and calculate" by whatever methods are suggested by "the most recent and widely extended experience."

The course of instruction is to be literary and industrial, embracing "all subjects usually taught in similar institutions." Special attention will be given in the Male Department to "drawing, carving, block-cutting, type-setting, ironsmith's work, coppersmith's work, carpentry, and general needlework," and in the Female Department to "artificial-flower making, embroidery, knitting, and general needlework."

The whole annual expense, including maintenance and salaries, is estimated at \$4,000. The control is to rest in a board of five directors, three of them foreign and two Chinese, elected annually by subscribers; \$7.00 entitles a subscriber to one vote, and \$35.00 to a life-vote. Larger donations multiply the voting power. Pay pupils will be received and also beneficiaries of every class. Government aid cannot be depended upon at the outset. Subscriptions are therefore solicited from the benevolent and philanthropic, very much as is done for the support of deaf-mute schools in Great Britain.

Other details might, and perhaps will, be hereafter given. The country has been deeply interested in the school recently established and successfully carried on by Mrs. Charles R. Mills, at Tung Chow, Cheefoo, China. Equal interest will doubtless be felt in the Shanghai Institution. The enterprise is evidently a solid, substantial one, under intelligent, reliable control, with a good prospect of an expanding future. It certainly appeals to the benevolent and philanthropic of America, especially to those interested and active in the instruction of deaf-mutes.

Conventions of the Deaf.—During the last summer an unusually large number of conventions of the deaf have been held in the United States. Some of them, as those of Michigan, Iowa, Wisconsin, Kentucky, Virginia, and Missouri, were reunions of former pupils of the institutions of those States, and were held at the institutions; others, as those of New York, Pennsylvania, and Maine, were meetings of the State Associations. At all these gatherings, aside from the pleasure of meeting old class-mates and friends, there were carefully-prepared papers and addresses, the discussion of important subjects relating to the welfare of the deaf, and the adoption of active measures for their benefit in various ways. Full reports of the meetings have been given in the deaf-mute papers, especially the *Journal* and the *Silent World*.

The British Association.—The "Second Annual Congress of the British Deaf and Dumb Association," held at Glasgow

in August last, was a successful meeting in numbers and in character. The Rev. W. Blomefield Sleight, a member of the Royal Commission, presided. The United States was represented by the Rev. Dr. Thomas Gallaudet, who read a paper on missions to the adult deaf, President E. M. Gallaudet, who delivered an address on methods of teaching and other topics relating to the instruction of the deaf, extracts from which are given in the present number of the *Annals*, and the Rev. J. M. Koehler, who gave details concerning the mission under his direction in Pennsylvania. A full report of the proceedings is given in the *Deaf and Dumb Times* for September.

International Congress of Hygiene and Demography.—At the meeting held in London in August last, General Moberly, of the London School Board, read a paper on the education of the deaf, in which he strongly advocated the use of the manual method to a considerable extent, and said that boarding-schools or institutions for the deaf were more desirable than day-schools. Among the Americans present were President E. M. Gallaudet and Dr. Warring Wilkinson. President Gallaudet made a short address, expressing his approval of General Moberly's views. Mr. Van Praagh, of London, also took part in the discussion.

South Australian Mission.—A mission for the benefit of the adult deaf of South Australia has been established through the efforts of Mr. Samuel Johnson, superintendent of the Institution at Brighton. Mr. Johnson will take charge of the religious services until a missionary pastor is appointed.

The Denison Fraction-Teacher.—Mr. Denison requests us to say that circumstances beyond his control have prevented him from carrying out his plans for furnishing the Fraction-Teacher to the schools that have ordered it; but that he is in hopes of soon perfecting arrangements with a Philadelphia firm of manufacturers of school supplies, so that orders can be filled in the near future.

As an evidence of the value of the device in the opinion of a practical educator of the deaf, it may be mentioned that Mr. Crouter, after seeing and carefully examining it, ordered *four*

for the Pennsylvania Institution. Every principal or superintendent who has seen it, we believe, has ordered at least one instrument, and a considerable number of orders have been received from others.

Verrier's Hearing Tube.—Recent numbers of the *Revue Française* have contained articles by Mr. O. Claveau and Mr. Ad. Bélanger concerning a new device to aid the hearing which is used in the school for the deaf at Bourg-la-Reine, France. Mgr. Verrier, wishing to instruct some of the pupils in order to prepare them for their first communion, thought that the best means to reach their intelligence was to take the usual way of addressing them through the ear, and so by gradual experiment and improvement arrived at the instrument which has been patented and bears his name.

The apparatus seems, from the description given, not to differ much from the ordinary conical hearing tube, except in having a detachable ear-piece, which is made to fit exactly in the ear of the individual who is to use it, and a larger and more spreading mouth-piece than usual; but the results reported are greater than those of any other device to aid the hearing.

During the whole of the past year this instrument has been used with *all* the pupils of the Bourg-la-Reine School, and with all has produced effects more or less surprising. It has been tried with more than three hundred deaf persons, not one of whom has failed to receive an impression of some kind at the first attempt. In some cases the best results have been obtained with pupils who, from previous experiments, seemed to have the least hearing. All the pupils of the School are now able to distinguish the vowels and certain consonants, some understand words, and others can carry on a conversation with the aid of this instrument. Both Mr. Claveau and Mr. Bélanger regard it as destined to be of great service in schools for the deaf.

A Blind and Deaf Poet.—Mr. G. E. Fischer, of Omaha, Nebraska, sends us the following item taken from the *Omaha World Herald* of September 15, 1891:

In Dresden the other day there celebrated his 70th birthday a singular being. It was Hieronymus Lorm, the poet, who for fifty-five of his many

years has been both blind and deaf. This singular man, wasted with age and ill-health, and laboring under terrible misfortunes greater even than those of Milton or Leopardi, instead of becoming embittered by his physical ailments, or having his temperament corrupted by the surging pessimism about him, has maintained a sweet disposition and a kind and appreciative heart. The poems of Lorm although now and then tinged with melancholy, teem with glad and hopeful music. His beautiful soul shining out through his work is a constant reproach to the spirit of modern German letters and philosophy, just as his noble life furnishes examples which his countrymen might do well to follow.

Insanity and the Sense of Hearing.—The Lewiston (Maine) *Journal* contains the following statement, showing a curious correlation between mental disturbance and the sense of hearing:

Dr. Sanborn, of the State Insane Asylum at Augusta, has a wide sympathy and feels deeply for his charges at the Asylum.

We were making a tour of the hospital with him the other day, when he stopped to speak to a young man who seemed very deaf. "You are better to-day, Samuel," said he, patting him upon the back. "You are much better, and I am glad to see it. Good-bye."

"When that man came here three days ago," said Dr. Sanborn, "he could hear with great acuteness. He was at this time very violent and had to be kept secure. As his mania passed he became deaf. He has been here before—comes here periodically—and each time I notice the peculiarity in his hearing. It is a curious case. What strange action of the brain is it that in insanity awakens his sense of hearing? In his mania his hearing is exceedingly acute; in his sanity it is exceedingly dull. The brain is a wonderful world."

We have written to Dr. Sanborn, asking for further particulars respecting this case, but have received no reply.

ADVERTISEMENTS.

AN Articulation teacher wishes a position. Best reference. Normal graduate with experience in teaching. Address Miss JEAN SEARLES Honesdale, Wayne Co., Pa.

ORAL TRAINING SCHOOL FOR TEACHERS OF THE DEAF, established in 1881. Course of Training in Bell's mechanism of speech; in methods of instruction employed in European and American oral schools, together with some original thoughts of Miss Garrett's in articulation, lip-reading, and language work. Instruction given in Bell symbols to any teachers desiring a knowledge of them, though Miss Garrett does not consider these an essential part of the valuable Bell system. Address Miss EMMA GARRETT, 221 Penn St., Chester, Delaware County, Pa.

AMERICAN ANNALS
OF
THE DEAF,

EDITED BY

EDWARD ALLEN FAY,

UNDER THE DIRECTION OF

**E. M. GALLAUDET, OF WASHINGTON, I. L. PEET,
OF NEW YORK, P. G. GILLET, OF ILLINOIS,
J. L. NOYES, OF MINNESOTA, CAROLINE
A. YALE, OF MASSACHUSETTS, W. O.
CONNOR, OF GEORGIA, AND R.
MATHISON, OF ONTARIO,**

Executive Committee of the Convention.

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CONTENTS.

	PAGE.
Our Profession, EDWARD M. GALLAUDET, Ph. D., LL.D.	1
The Teaching of Arithmetic, WESTON JENKINS, M. A.	9
Religious Training, Rev. PHILIP J. HASENSTAB, B. A.	15
How Helen Keller Learned to Speak, SARAH FULLER	23
Technical Training, WARREN ROBINSON, M. A.	30
Jonathan Whipple, IDA WHIPPLE BENHAM	32
Moral Education, ESTELLA V. SUTTON	34
A World's Congress of Teachers of the Deaf, PHILIP G. GILLET, M. A., LL.D.	43
An Ecumenical Congress of Instructors of the Deaf,	45
NOTICES OF PUBLICATIONS:	
Patterson's Course of Instruction, JAMES L. SMITH, M. A.	48
The Lyon Phonetic Manual, JOSEPH C. GORDON, M. A.	53
Nissen's Swedish Gymnastics, ALBERT F. ADAMS, B. A.	54
Sexton and Duane on Deafness; Reports of Schools, etc., F. A. F.	57
Tabular Statement of American Schools, 1891, E. A. F.	58
Methods of Instruction in American Schools, E. A. F.	68
SCHOOL ITEMS: Alabama, Arkansas, Central New York, 73; Colorado, Dakota, Evansville, Florida, Fredericton, Georgia, Indiana, 74; Kentucky, Louisiana, Mackay, Manitoba, 75; Maryland Colored, Minnesota, Missouri, 76; Nebraska, New England Industrial, New Jersey, North Dakota, Ohio, 77; Pennsylvania Home, St. Louis, Sarah Fuller, 78; Western Pennsylvania, Wisconsin, 79, E. A. F.	73
MISCELLANEOUS: The Hygienic Value of Speech, 80; A Note from Mr. Westervelt, 81; Helen Keller's Teacher, 82; The Seventh Conference, 82; Bonet's Work, 83; Statistics of German Schools, 83; Census Statistics of Schools, 83; "The Visible Speech Pioneer," 84; Periodicals, 84, E. A. F.	80
Memory in the Education of the Deaf, W. G. JENKINS, M. A.	85
Asked, Said, Told, ANNA C. HURD	94
Benson.—III, WILLIAM A. CALDWELL, M. A.	104
A Case of Recovery of Hearing, Rev. JAMES H. CLOUD, M. A.	109
How the Deaf Converse with Each Other in Norway, LARS A. HAVSTAD, M. A.	113
Letters to a Beginner.—I,	118
The New Departure at Kendall Green, JOSEPH C. GORDON, M. A.	121
How Helen Keller Acquired Language, ANNIE M. SULLIVAN	127
A Statement, M. ANAGNOS, M. A.	154
Is Helen Keller a Fraud? JOB WILLIAMS, LL. D.	156
The Seventh Conference of Principals and Superintendents,	160
The Second Meeting of the American Association to Promote Speech,	161
SCHOOL ITEMS: Alabama, Albany, Arkansas, Buenos Ayres, Dresden, 162; Illinois, Kansas, Michigan, Minnesota, 164; National, Ontario, 166; Pennsylvania Home, Pennsylvania Oral, Texas, Miss Warren's, Western New York, 167, E. A. F.	162
MISCELLANEOUS: The Photography of Speech, 168; The Use of Story-Books, 169; The Michigan Annual Census, 170; Fraction Discs, 171; The Next Convention, 171; The World's Columbian Exposition, 172; Second Italian Congress, 172; A Petition to the German Emperor, 173; Church Work, 174; De l'Épée's Birthday, 175; Publications of the Volta Bureau, 175; Reports of Schools, 176, E. A. F.	168

	PAGE.
Some Reasons for Teaching History, KATHARINE FLETCHER	177
An Instructor in Reading, Rev. PHILIP J. HASENSTAB, B. A.	183
Six Months with a Beginning Class, KATE S. LANDIS	189
A Sixteenth Century Treatise, A. FARRAR, Jr.	198
The Whipple Natural Alphabet in its Revised Form, DAISY M. WAY,	206
A Note from the School-Room, WM. A. CALDWELL, M. A.	215
Language, SARAH H. PORTER	219
Letters to a Beginner.--II,	227
SCHOOL ITEMS : Illinois, Iowa, 232 ; La Crosse, Manitoba, Michigan, National, 233 ; New York, Ohio, Pennsylvania, 234 ; Wash- ington State, 235 ; Western New York, 236, E. A. F.	232
MISCELLANEOUS : A Deaf Physician, 236 ; A Deaf Lawyer, 236 ; The Rapidity of the Manual Alphabet, 237 ; Mr. Arnold's " Lip- Reading," 237 ; The Verrier <i>Audigène</i> , 238 ; " Education of Deaf Children," 238 ; President Gallaudet's Glasgow Address, 239 ; " Values in the Education of the Deaf," 240 ; Church Work, 241 ; The Seventh Conference of Principals, 241 ; The Second Meeting of the Association to Promote the Teaching of Speech, 243 ; Publications Received, 243, E. A. F.	236
The Presentation of Language, JOHN A. GILLESPIE, M. A.	245
Hereditary Deafness, HARRIS TAYLOR	249
Encourage the Pupils, A. U. DOWNING	260
A Few Common Difficulties in Our Work, A. R. DODDS	264
Language Teaching, D. GREENBERGER	267
The Ideal School for the Deaf, E. M. GALLAUDET, Ph. D., LL. D.	280
The Seventh Conference of Principals and Superintendents, E. A. F.	286
The Second Meeting of the American Association, F. W. BOOTH, B. S.	292
NOTICES OF PUBLICATIONS : First Summer Meeting of the American Association, 295 ; Bélanger on Lip-Reading, 295 ; Bell on Ar- ticulation Teaching in America, 296 ; Davidson on Oral Work, 298 ; Ferreri on Education, 299 ; Van Praagh on the Deaf and on Lip-Reading, 300 ; Reports of School, 301 ; E. A. F.	295
SCHOOL ITEMS : Albany, Arkansas, Chicago, Clarke, 301 ; Colorado, Evansville, Florida, Horace Mann, 302 ; Illinois, Iowa, Kan- sas, Michigan, 303 ; Midland, Minnesota, Montreal Female, 304 ; National, Nebraska, New England, New Jersey, New York, New York Improved, North Dakota, 305 ; Ohio, Ore- gon, Pennsylvania, Portland, South Dakota, 306 ; Texas, Vir- ginia, Western Pennsylvania, Wisconsin, 307, E. A. F.	301
MISCELLANEOUS : American Schools, 308 ; The World's Congress of Educators, 308 ; The World's Congress of the Deaf, 309 ; Re- cent Conventions of the Deaf, 309 ; Congress of German Deaf-Mutes, 309 ; President Gallaudet's Glasgow Address, 310 ; The Verrier <i>Audigène</i> , 311 ; Abusive Language by Signs, 311 ; An Austrian Periodical, 312, E. A. F.	308

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OUR PROFESSION.

OUGHT the teaching of the deaf to be regarded as a profession? If this question be answered in the affirmative, what amount and kind of training are necessary to entitle one to become a member of the profession? Ought there to be grades in the profession, or should all who are allowed to practise it be required to conform to a prescribed standard of attainment?

I venture to ask the attention of the readers of the *Annals* to a consideration of the foregoing questions, for I believe that the importance of many points involved has been overlooked by not a few who have the interests of the deaf of our country sincerely at heart.

There was a time not very long ago when the term "professional man" was applied only to a clergyman, a doctor, or a lawyer, the learned professions being limited to theology, medicine, and law. But the notable extension of human knowledge which has marked the last fifty years, coupled with the advance of invention during the same period, has so enlarged the scope and variety of human effort that many occupations once crudely followed as trades have risen to the rank of professions, while others quite unknown at the beginning of the century have been granted places by the side of the traditional three. This number had been doubled more than a generation ago, for Macaulay speaks of "five or six professions tried unsuccessfully" by one of his characters. But the present range of "the professions" has reached a much larger limit, and we do not hesitate to accord the rank to artists, actors, architects, engineers, military officers, chemists, musicians, and many others whose occupations demand for their successful pursuit



an amount of preparatory study and training far surpassing that required for the "learned professions" a hundred years ago.

The wide-spread establishment of normal schools, the recent growth of post-graduate courses in colleges, as well as of true university work at several great educational centres in this country, all being more or less intended to train men and women for the work of teaching, will justify, I think, without a question, the application of the term "profession" to the general occupation of instructing children and youth.

If the work of ordinary teaching may properly be called a profession, much more may the teaching of the deaf be so considered, for though the end sought is the same the difficulties to be overcome are greater, more skill is needed in devising means and adapting them to ends, and more profound knowledge at many points is demanded.

The fathers of deaf-mute instruction in this country certainly entertained this view of the grade and character of their work.

Dr. Harvey P. Peet, practically the founder of the New York Institution for Deaf-Mutes, makes early record of his opinions in his second and third annual reports, those for 1832-3, as follows :

We all know the difficulty of acquiring an unknown tongue. We all know the perplexities which obstruct our progress in the endeavor to acquaint ourselves with the Latin or the German. And how few among those who can *read* these and other languages with facility can write or speak either. Yet we have, in the very beginning, an instrument to aid us which gives us an advantage over the deaf and dumb, like that which the mechanical powers afford above mere animal strength, directly exerted. This instrument is grammar—for grammar is not peculiar to any individual language, but extends itself in all its essential principles over the whole field of artificial communication. In acquiring the French or the German, we have only to substitute new names and new inflections for others already known. We construct a machine of new materials, with certain trivial modifications, upon a model before our eyes, but the deaf and dumb have yet to learn the principles on which the machine was originally constructed. They have not merely to translate, but to invent. Are not talents, are not ingenuity and mental discipline, necessary in the man whose task is to lead them onward in this process of invention? Few persons understand how artificial, how intricate, in fact, how anomalous, are the combinations of words upon their lips every hour of the day. Their knowledge of language has been imperceptibly acquired, and they do not reflect that this language is a structure which has been growing more complicated since time began. No person, in fact, can be conversant with the deaf and dumb for any space of time without being convinced that to teach them even the elements of language requires a greater knowledge of the workings of the human mind, a more philosophical

acquaintance with the great medium of communication, and a more thorough intellectual discipline on the part of the instructor, than is required in any other branch of education.

Talent and thorough education on the part of their teachers they [the directors] have regarded as absolutely essential. In fact, in the education of deaf-mutes, they can hardly conceive of complete success without these qualifications: The nature of the task, indeed, is as widely different from what it may appear to the superficial observer as order is remote from chaotic confusion, or as the certainty of science is exalted above the vagueness of conjecture. To him whose business it is to convey to the minds of children, possessing the privilege of speech, the rudiments of knowledge, an acquaintance with mental philosophy, or a familiarity with metaphysical inquiries, however desirable, is not deemed indispensable. And why? It belongs to him to impart facts, and not principles; knowledge, and not the artificial medium through which the same knowledge is to be made to reappear. It is easy to find instructors of the deaf, possessing, to as high a degree of perfection as the deaf themselves, the power of communicating to others facts of whatever description, independently of sound, while they may still be incompetent to the execution of the task to which they are summoned. And the reason is, simply, that this great task consists in teaching, not facts, but language: the power of communicating thought through a medium entirely novel, constructed on philosophical principles, out of materials having no peculiar adaptation in nature to the purposes which they are made to fulfil. To the instructor of deaf-mutes, therefore, the philosophy of language in general is of more consequence than the nomenclature of any one in particular, and the study of *mind in its faculties and its operations* is essential to success.

These views of Dr. Peet's were in full accord with and in furtherance of those earlier expressed by Thomas Hopkins Gallaudet, one of whose assistants he had been for nine years at Hartford, and to whose careful training his eminent success as a teacher was largely due.

Dr. Gallaudet, in his fifth annual report (1821), says, in speaking of the presence at Hartford of persons desiring to fit themselves to be teachers of the deaf:

No one should undertake the education of the deaf and dumb who has not been trained to it by a long and intimate acquaintance with them. This is necessary for a teacher in order to become familiar with the singular peculiarities of their minds and characters, to learn all their various modes of expressing their ideas by the natural signs which they themselves have invented, and to gain that simplicity of thought in the communication of knowledge to such uncultivated minds, and that versatility of manner in his intercourse with them, which will be accommodated to the different aspects under which their native genius, or acquired habits, may present themselves. In addition to all this, he should make himself master of that methodical system of signs, which the combined talents and experience of European instructors have been for years maturing.



teachers employed was seventeen, of whom nine were women and only four were college-educated men.

The salaries of these seventeen instructors amounted to \$11,500, averaging \$676 each. The *per capita* cost of instruction was \$36.85.

By this process of squeezing, for it deserves no better name, there was saved in 1870, as compared with 1865, the sum of \$3,681.92, *out of the department of instruction*, while the general *per capita* cost of carrying on the institution *was increased* from \$191 in 1865 to \$246 in 1870.

In making the foregoing comparisons I do not wish to be understood as condemning the employment of women in schools for the deaf. Far from this, I am in favor of their employment in a reasonable proportion. What I do condemn is the regression from fifty per cent. of college graduates in the corps of instructors in 1865 to twenty-three and a half per cent. in 1870.

Following the history of this institution five years longer, I find in 1875 a corps of twenty-three instructors, of whom fifteen are women, and only four college graduates.

So there were in.....	1865.	1870.	1875.
College graduates.....	4	4	4
Men	8	8	8
Women	0	9	15

The proportion of college graduates in 1875 was only a little more than seventeen per cent., and this percentage remains unchanged.

If the curious student will study the files of institution reports covering the last thirty-five years, he will perhaps be surprised to see how the proportion of highly-educated *men* among our teachers has been lessened in many places, and the conclusion cannot be resisted that the standard of efficiency in the profession has been correspondingly lowered.

But some may say, in answer to the third question with which this article opened, there *ought* to be grades in the profession, and it is unreasonable to require that all teachers of the deaf should be college-educated men.

I am willing to admit this, but would ask in reply if it would be unreasonable to require that a considerable proportion of the *women* admitted to the profession should have had the advantage of college training?

It will not be an easy matter, perhaps, to say just what the grades should be, or in what precise proportion men

and women, college-educated and otherwise, should be employed; but I do not hesitate to express the opinion that in no corps of instructors should women be in the majority, and that of college-educated persons there should be at least two-thirds. This means larger expenditures than are now provided for, and more courage in many quarters in asking for the funds needed to carry on schools for the deaf as they deserve to be sustained. The ambition to show a low *per capita* cost of maintenance is an unworthy one. It seldom indicates a wise economy, but rather a costly loss to those who have a right to the best the State can give them. "There is that withholdeth more than is meet, but it tendeth to poverty."

To a demand for diminished expenditures from a legislative committee or a board of directors the reply should be made, "If the institution's expenses *must* be curtailed, we will spend less in the kitchen, less in the workshop, less for clothing, but never less in the school-room."

Not long ago I heard with amazement from the principal of one of our largest and wealthiest institutions that there was great need of more educated men in his corps of instructors, but that he feared his directors would not only decline to authorize the employment of even a single additional man, but would increase the proportion of women, already too great, for the sole reason that their services could be had at low rates. And this institution is in a community where wealth abounds—where legislative provision, if that were insufficient, could easily be supplemented by private donations—a community that would vehemently condemn any board of directors which should carry out the policy of weakening the teaching force of a public educational institution for the sake of saving a thousand or two of dollars.

There is undoubtedly just occasion for careful scrutiny by legislators in state and nation as to the expenditure of the public money and for retrenchment at many points. But when the question concerns the education of the rising generation, and especially the training of those who are seriously handicapped in the race of life, but who ask no favorable odds in that race, if they have only that *best* education, which is their right, those who are appointed to plead the cause of these wards of the people should be brave enough to ask for such liberal appropriation as will secure the highest possible effi-

ciency, the fullest possible development; and they should be stubborn enough to accept no less than this, preferring rather to close schools than to carry them on when they have been emasculated by the evil spirit of parsimony hidden under the thin disguise of provident economy.

I am by no means alone among teachers of the deaf in recognizing as a source of present weakness in "our profession" the relatively small number of highly-educated and thoroughly-trained persons in its ranks. And it is with the purpose of beginning, at least, to supply this lack that a small number of college-educated young men are being afforded in the College at Washington an opportunity of fitting themselves to be capable teachers of the deaf. That instructors of such attainments as they have made, and will make, are needed in "our profession" is certain; that they will soon be well prepared to do the best kind of work in either of the great methods of teaching is believed; but whether they will be retained long in "our profession" or not will depend on the measure of appreciation with which they are received into our ranks, and on the courage and persistence with which the managers of our schools seek the means which will enable them to have and to retain a good proportion of the best and most highly-trained talent in the work of teaching. The old adage, "the best is always the cheapest," is as true in the intellectual as in the material market. Our colleges and universities recognize this fact everywhere, and the most acceptable qualification to-day in a college president is his ability to beg, that the endowments may be increased, and professors of distinction and efficiency be employed who can offer instruction of the highest order.

Where has anything of this sort been done for schools of the deaf?

While their sister institutions have become great reservoirs of wealth and correspondingly sources of good, they, in not a few instances, have been denied even their ordinary income, instead of being accorded that reasonable increase which the steadily enhancing cost of living justly demands.

The work of educating the deaf is a profession, and one entitled to rank with those of first importance. During the three-quarters of a century of its existence in America it has had in its ranks a noble line of scholarly and highly-trained members. And it does not lack a goodly number of such men and women

to-day. But the majority of *them* are underpaid, and their number is far too small. For the strengthening, and even the *saving*, of "our profession" by the bringing in of new, strong, live material *at the top*, and by devising liberal things for those who are its salt, I bespeak the co-operation of every principal, every superintendent, and every director under whose eye these rather hastily, but very earnestly, written lines may fall.

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THE TEACHING OF ARITHMETIC.

THE teacher of the deaf has many difficulties to surmount, but in no line of effort, perhaps, does he meet so much discouragement as in teaching arithmetic.

It is true that in the command of oral and written language, after a long course of skilful and patient instruction, his best pupils may fall very far short of the point he has aimed at, as a heavily-loaded merchantman lags behind the trade-wind which drives her on. But then the obstacles which lie in the way of the deaf-mute in learning the use of the English language are evident to any one—at least to any teacher—while there really seems, at first sight, no reason why the science of numbers should be so much more difficult to him than to a hearing pupil. Geography, history, mechanics, physiology, chemistry—all these we have seen a class of deaf-mutes grasp with intelligent interest, and appropriate thoroughly and rapidly. Why should the same pupils who enjoy the air and the prospect of the Delectable Mountains, while ascending these heights of knowledge, find that their path to a similar vantage-ground in the study of arithmetic lies all the way up the steep of the Hill Difficulty? No point in our work, it seems to me, is more deserving of careful investigation. If we can make a correct diagnosis, we may hope to find an adequate remedy.

For one thing, the lack of a true mother-tongue probably has more to do with this deficiency than is usually considered. We must remember that in this, as in all lines of mental development, it is the first step that costs; it is the easy, accurate, yet half-unconscious handling of the elementary processes, applied on the smallest scale, that lays the humble yet all-important foundation for the whole superstructure. While thinking of this subject, and in the course of a few days'

observation, I have noted the following instances of spontaneous arithmetical exercise occurring in the conversation of a group of children about eight years old. It should be remarked that in no case was the subject introduced or hinted at by an older person, nor, as will be seen, has the phraseology been recast to conform to the prevailing views on the subject of grammar.

“It is three miles to Manalapan and five miles to Freehold ; if it was one mile more it would be twice as far.”

“Stella picked six quarts of raspberries and she gets a cent and a quarter a quart. She earned ”—pause—“seven cents and a half. But we have no half cents. I wonder if she got seven or eight cents.”

“Dan is fourteen ; when I am as old as he is, he will be twenty.”

“I can easily earn ten cents picking blackberries ; you get two cents a quart, and I can pick five quarts mighty quick.”

If we reflect, we shall probably be convinced that in an average household the cost of articles of common use, the quantity consumed, the rate of wages by the day or by the piece, and the product of such rate by a given number of units of work, are among the most common subjects of discussion. A child who hears much of this talk will have the same kind of advantage in studying arithmetic that one who has been accustomed to note the growth and the habits of common plants will find when he begins the systematic study of botany.

Perhaps, too, less intelligent study may have been given in our schools to pedagogic principles and methods of teaching arithmetic than in language teaching. We have word-charts, color-charts, stories illustrated with pictures, pictures which suggest stories, museums of simple objects—in short, everything that can make real to the pupil the sentence which he is to use. What corresponding devices have we in arithmetic? Do teachers usually take as much pains to make sure that the expression carries to the pupil a clear idea of the thing meant in their arithmetic classes as in their language classes?

In view of the difficulties of the subject, our first care should be, in laying out a course for our pupils, to subordinate everything which is not practical and necessary. The tables of foreign money, the little-used Troy and Apothecaries' Weight, the rules for computing partial payments, square and cube root, may be remorselessly cut out of the study, as re-

quired from our less intelligent pupils. In fact, when we have cut down our arithmetical baggage to light marching order, we shall perhaps find that we can go far with only the "four ground rules," the decimal system, fractions (and very little work done with them in the higher denominations), and a thorough knowledge of inches, feet and yards, pounds and ounces, pints, quarts, gallons, and bushels.

But in narrowing the field to be covered, we must make sure that, to borrow a phrase from the logicians, as the extension diminishes, the intension is increased. However it may be in other schools, it will not do for our deaf-mute pupils to think of cords of wood, or pounds of sugar, as mere abstractions. What they do study must be as familiar to them as are their bat and ball, their dolls and their dances.

As to the primary teaching of numbers and their combination, there is no need of much to be said. No capable teacher now-a-days drills a child in adding up long rows of figures, then teaches him subtraction as an entirely new process, and after practising him on subtracting the rear rank from the front rank of a battalion of figures paraded along the whole front of his slate, initiates him into a still more mysterious cult called multiplication, and finally confers the crowning degree in two sections of short and long division. This way is, perhaps, "mental discipline;" it may teach adroitness; it may be useful as a training for games of jugglery; but whatever its usefulness may be, it is of no use worth mentioning in teaching arithmetic to deaf-mutes.

It is now well understood by most teachers that primary arithmetic should be taught by giving a thorough knowledge of the first few numbers, and that the "ground rules" are only different phases of one mental process by which the learner grasps the idea of the combination of units in a number. Here is the decisive battle-ground—the mastery of the first dozen, or, at most, the first score of numbers, is the key to success in the series of campaigns which are to follow. We cannot too often recall the truth that all our knowledge is based on what we learn through the bodily senses, and as our ideas of numbers are acquired through the sense of sight, it follows that the numbers which we can recognize by a single act of sight are the most important in education. Now, we can recognize in this way, perhaps, four or five, certainly not as many as ten, objects. Then these numbers and their pri

many combinations up to, say, five times five, are the proper subjects of primary arithmetical study, and they should be studied until the scholar can combine them and analyze them as easily and as unconsciously as he uses his legs in walking. Much banking on an inflated capital of arithmetical knowledge comes to grief for lack of this indispensable specie reserve. In arithmetic, as in other things, we are obliged to do most of our thinking by symbols, so to speak. When we talk of constitutional government, or of mobilizing the German army, or of a million dollars, we cannot have before our mind at once the whole of the thing we are discussing. But, if we talk at all about such things, we must know the difference between a statute and a ukase: we must understand what it is to serve with the colors and in the reserve; how many tens, scores, dozens, hundreds there are in a million. If we do not, our alleged thinking is a mere muddle.

The teaching of the language used in arithmetical reasoning is equally important with that of the number idea, and should be carried on concurrently with it. We are aware that some excellent teachers are opposed to this, holding that the attention is diverted from the idea of number by the effort to master phraseology, and that this work should be left to a later stage. But surely the skilful teacher can so apportion the time and vary the exercises that the two kinds of work may go on together, not only without clashing but so that each may help the other.

Fractions are taught by applying the same principles used at the outset. The whole to be divided may be best and most conveniently represented at first by a disc of stiff paper. By using a circle, we may show the pupil that the half bears a definite relation to the whole, and is not merely a little one, which is the impression often given when a line or a rectangle is used as the standard. (We should think that the manufacturers of kindergarten material might well enlarge their stock by adding colored discs showing, some the division into halves, fourths, and eighths; others, the thirds, sixths, and twelfths—these discs so arranged as to be separated into their component parts and reunited at will.) Later, the fractions of a yard and of an inch, as shown on a yard-stick and on a rule, will be helpful, and many other devices will occur to the thoughtful teacher.

Decimals are properly a part of numeration, and may be

taught with this subject. That is, as soon as a child has learned that he can repeat one pace on the floor ten times and can estimate and record the distance covered, he can learn to divide one pace into ten equal parts and to measure and record the length of each part.

The rods of one metre long, divided on different faces into deci-, centi-, and millimetres, are admirably adapted for this purpose. For teaching the use of terms of money, capacity, weight, linear and superficial measure, the standards will, of course, be at hand when needed, and will be freely used until the terms denoting them are closely associated in the pupil's mind with the objects themselves.

After all discussion of methods, it remains to be said that, while method is a good thing, it is not the thing. What is most needed is that the teacher, who must be faithful and competent, be fully impressed with the importance to the pupils of this study and with the hindrances to their acquiring an adequate knowledge of it, and that he set himself to work, under the stimulus of sympathy and of professional pride, to devise ways to bring arithmetic out from between the covers of the text-book and into the daily life of his pupils.

I would have all studies penetrated with arithmetic, as every activity in the life of a good husband and father is informed with the love of his family.

Form in your pupils the habit of estimating, as accurately as may be, the weight and dimensions of the objects they see and handle every day, of judging distance and height, of learning the value of all ordinary commodities. This, with thorough elementary drill in numbers, as explained above, and with slight suggestions from the teacher, will tend to form in the pupil the habit of making calculations for himself. The height and weight of each member of the class; the quantity and price of the stuff for a new frock; the weight of the daily ration and the number to be fed, with the cost; the size of the parlor, the width of the carpeting, and the cost; the extent of the ground about the school; the consumption and the price of coal, gas, and water; the variations of the thermometer, the quantity of lumber needed for a door or a box, and its cost, are but a few of the questions suggested by the things at our hand.

If we are studying geography, and we are told that a certain river is one hundred and fifty miles long, one and another pupil

will be ready to tell how many miles he has walked on a stretch, and to calculate how long it would take him to walk from the mouth to the source of that river.

In history, we may read that a general with 40,000 men and perhaps 8,000 horses was hard pressed for supplies. How many tons of food and forage did he need for daily consumption, and how many wagon-loads and how many car-loads would it make? In elementary physics and chemistry (and these facts are more practical and more useful than those of the history and geography of remote times and places), the relations of facts should be taught at every step by means of numbers. A cubic foot of water weighs (approximately) sixty pounds; there are about $7\frac{1}{2}$ gallons of water in a cubic foot; iron weighs rather more than seven times, lead about eleven times, and gold about nineteen times as much as water; in slacking lime you add about one-third its weight in water—these and all the other similar facts that one may learn can be connected and made available by off-hand arithmetical problems. How much interest Professor Tyndall attaches to a statement of the mechanical equivalent of heat by his comparison, at once poetical and matter-of-fact, of the energy displayed respectively in the thunderous descent of an Alpine avalanche and in the dissipation into vapor of an infinitesimal fraction of its material!

Let the teacher feel his pupils' deprivation as if it were his own: let him keep the arithmetical question "recurring and suggesting still" to their minds, and, if his work is based on right principles, he will do more than can be done by mere adherence to approved methods and mechanical drill.

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THE RELIGIOUS TRAINING OF THE DEAF CHILD.

Any individual engaging in some responsible profession, no matter how familiar he may be with the nature of the work assigned him, will have his ideas pertaining to it modified or constantly changed as from time to time he gains experience therein. Mistakes discovered, failures sustained, anticipations frustrated and disappointed, victories gained, and various other phases incidental to the engagement, have much to do with these changes. Moreover, these phases usually exert an influence in shaping out and developing the individual's character, so that, at any time later on, the character comes to possess a different aspect from what it had at the beginning; and so with regard to his ideas, tastes, and thoughts. When kept going on in the right direction, the character, ideas, tastes, and thoughts assume a better shape from time to time; but when neglected, they take the reverse direction. The writer's view of the teacher's work from a religious stand-point has been greatly affected in the manner described above. His views have been undergoing a constant change ever since he was called first to the position of supervisor, and then to that of teacher. Though conscious that his present ideas bearing upon the subject still come short of perfection, yet within his bosom there exists a longing to speak to other teachers, especially to the coming teachers, of his experience, often bitter to himself, and the observations and thoughts of the past few years.

Before discussing the nature of the work needed to carry on the religious training and spiritual development of a deaf child, it may be proper to consider the various circumstances governing the life of the child previous to its coming into contact for the first time with the school, and to look around and understand the general spiritual condition of deaf adults in comparison with their hearing brothers and sisters. For when a teacher is acquainted with the characteristics of these two extremes to such an extent as to devote himself all the more to the right training, he will be able to do what would have been impossible otherwise. These characteristics will have their consideration later in this paper.

It is not sufficient merely to teach a child to read and write, but he must be educated, *i. e.*, led forth out of darkness into light. This kind of education is all the more demanded for

the deaf child by reason of his helplessness, as none of the dear ones at home can do that work. This means to secure him the blessing of becoming an intelligent human creature in all possible ways, physical, mental, moral, and spiritual. Then, to this end, it is absolutely necessary, for the child's sake, that only persons be appointed to the responsible charge who can and will conscientiously execute the stated duties, for it will be difficult to amend the injury afterwards that has been received in childhood. The teacher should educate by example as well as by precept, and, whenever practicable, impress upon the children their responsibility for their daily bearing toward one another and toward their Creator, the value of their time and the momentous consideration of eternity.

Any new teacher not equipped with a wholesome knowledge and deep experience of religion is a direct curse to the welfare of the little children intrusted to him, and indirectly to the community over which these children may have some influence. However honest he may endeavor to be in his duties within the school-room walls, and however good and upright in morals he may constantly prove himself to be, yet without the means of laying the true foundation in the building up of the immortal soul, he is a complete failure in his profession of educating his fellow-beings for time and eternity. However brilliant he may be in his literary attainments, energetic in his educational accomplishments, superior and clear in intellect, strong and great in his influence over those among whom he daily moves, successful in what things soever he undertakes to accomplish, he is nothing in the eye of his Master if he does not do all these things to His glory who sent him into the world to do His will. A teacher possessed of a clear, quick intellect, but without any religious experience whatever, may make a splendidly intellectual class, and for this result the school authorities may give him credit and the people laud him, though at the expense of the innocent children's spiritual welfare. But what portion of this bright teacher's work does the great Teacher weigh most? So, while the people here praise the teacher for the work that he has executed, there in His book of life, in the column against his name, He marks the most conspicuous of all figures, 0, simply because of his neglect of the more important portion of the work—spiritual instruction and example. Therefore, above all, no person should take a teacher's position in order to be kept occupied in some pos-

sible way, or for the salary that the place may command, or to use it as a stepping-stone to some other profession. He ought to accept it only because he feels called to it. He needs to be able to consider himself called, like Moses, and sent forth to accomplish the work that had been arranged beforehand for him. Such teachers are desirable, inasmuch as only they will make true teachers. Politics or favoritism cannot, with justice to the child's welfare, be recognized and accepted as an excuse for any one's appointment to the school-room; for it would produce in some form a curse sooner or later, unless Providence should take it as a means of converting him and making him the better for the work.

Is it not desirable to have the applicant aware of what he is expected by the authorities, behind whom is the Creator and Father of these innocent souls, to accomplish among and for them? Many may have the ability to teach with success from the book only. This may seem enough to many individuals at first glance, but a careful reflection will show that something higher is needed. Children are made up unlike, physically, mentally, and spiritually. What is meat to one is poison to another. Book-teaching, therefore, is insufficient. Some teachers have the capacity for furnishing outside information whenever suggested by the book. This is better. Still better is it when one is able to enlighten his pupils upon any topic of information and learning at any time, in season and out of season. Then immortality and religion, which ought to be a part of their daily thought, would be included. Therefore, want of this very capacity and readiness is a serious stumbling-block. There are, however, persons who possess such points of belief as are not in accordance with the teachings of the inspired Word, but who conscientiously live up to what they believe. It would not agree with their conscience to guide children any farther than the limits of their own creed. The question of appointing such persons rests with the conscience and judgment of the authorities of the school.

Many children are brought to the institution who have suffered much neglect at home on account of the ignorance, or drunkenness, or brutality of their parents and guardians, and upon whose minds inferior and wrong impressions have been cast, and in whose hearts seeds of bad thought and action have been sown. When left to themselves and kept away from educational influence, these impressions will surely become

more and more deeply stamped into their character, and these seeds take firmer and deeper root, and consequently the poor children develop into ignorant, or drinking, or brutal men and women. Their institution life, then, is the critical point at which good impressions must take a permanent root for life, and also for eternity. Here in the school our teachers need to be able to perceive the existing wrong ideas and proceed to remove them. To this end they must have grace and wisdom and guidance in their duties.

As the teacher is, so will the pupils be. If his principles are loose and he indulges in bad habits, the same will become true of pupils, unconsciously on their part. Children are apt to imitate. Will the teacher consent to have his own children corrupted by weak principles and habits? If not, why should he thus spoil those children whom their parents, by reason of their own inability to teach them the way they should go, have intrusted to him? It cannot be denied that such a teacher has betrayed his trust, however successful he may be in imparting secular knowledge. Not only the head but also the heart needs its due cultivation.

During his institution life the child relies wholly upon the teacher for what he can learn from him; and then to give the child but little of religion deprives him of many days of blessed and helpful reflection and experience in after years. If insufficiently taught, his conscience will continue to be closed, more or less, against various urgent calls for good deeds. Thus he misses the blessing of doing good to humanity because of his lack of careful training, which would develop him into an upright, Christian man, approaching the image of his Creator. He should be brought up in the Lord; otherwise the curse of the neglect of that duty will sooner or later be shown in his character. A child away from home ought to be to his teacher as his hearing brother is to his father, his mother, his Sunday-school teacher, and his pastor at home. The brother has the family worship, the habit of going to church and of kneeling at his mother's knees and saying his prayers, and other helpful influences, which need to be supplied in some equivalent way for the child in the school. He wants such helpful training as will secure him the same good results that his brother obtains under the parental roof. Omitting all doctrines and beliefs peculiar to various churches, the work of raising the child in the truth as taught in the Bible, and acceptable to all these

churches, cannot be held to be sectarian. Then banish all objections to this work raised upon the false pretence of its falling in line with the sympathy of a particular church. May each one, like Elijah, be able to say, "I have done all these things at Thy word."

There are bad habits and practices against which children are urgently warned, and even rules are prescribed for their proper guidance. Is it consistent if the teacher himself indulges in some of these habits? Such indulgences as I refer to are often defended on the plea that they are enjoyed only in private parties or at one's home. But all the time their influence spreads, like the wind, whither no one knows, causing unsuspecting, weaker individuals to fall.

Think of many good parents still praying and longing for the spiritual development of their dear children now in school far away from their respective homes. Many of them may feel much relieved upon being assured hopefully in some kind way that their children are being spiritually looked after as they should be. An instance of that loving relation has come within the writer's experience. In her letter to a son here, his mother wrote thus: "Do you read your Bible now? I was very much grieved to hear you were not trying to be a Christian now. Talk with Mr. H., and may be he could give you some good advice about it. I wish you to be a good Christian boy and man." Later on, in another letter she wrote: "I was so pleased to hear that you were trying to be a Christian. Do you not think that you had better join a church? I think it would be a help to you. I would like to have you join the —— Church, if you unite with any. Could you get some one to help you see about it? Dr. G. would help you, or I think Mr. H. would be kind enough to assist you. I would be glad to have you attend to it right away. * * * Write soon and let me know * * * if you are going to join a church." A note was written concerning the boy's progress and experience, and sent to her, from which some extracts may be copied here: "I am very glad to state just here that in the midst of much temptation and discouragement which H. was meeting with, these two letters have helped him. The prayerful words of a good, loving mother cannot fail in their mission, and I am thankful to think that he has a mother who is so anxious for him to be a Christian boy, and a Christian man, when he grows to be a man. * * * Of late he has been earnest in thought

and word and behavior becoming a Christian, and I may state that at last evening's prayer-meeting he surprised me with a testimony to his experience. It was good indeed." The note was closed with a suggestion that the boy might have certain helps in the way of reading matter. To this suggestion, the mother, though a widow of small means, made a very substantial answer in the form of three dollars, the amount required with which to purchase a good reference Bible, a copy of "Helps to the Study of the Bible," and a year's subscription to a weekly paper devoted to the cause of Christian endeavor. The money was accompanied by further advice: "I will send three dollars to you for the paper and Bible. I hope you will make good use of them, and that they will help you to understand more fully what it is to be a Christian. I am also very much pleased to know that you have such a friend and adviser as Mr. H. I am sure if you follow his advice you will not do wrong. If you join the church, try to understand what it is and what it means. If you are earnest and faithful to your duty as a Christian, you will not have any serious trouble. Hoping you will do what is right, I believe you will."

"Let every man be occupied," says Sydney Smith, "and occupied in the highest employment of which his nature is capable, and die with the consciousness that he has done his best." Let this apply to the teacher, and let him accomplish whatever good there is in the line of educating his pupils in religious matters; then he is doing that which could not otherwise be done. Those who enjoy possessing and practising the blessing of a Christian life entertain a desire to see the children intrusted to their care reach the blessing also. Then it is a matter of love on their part to go beyond the limit of mere teaching, and lead them into the realm of bliss.

A good seed may be planted in the child's soul that will develop, directing all his thoughts, desires, words, and deeds in the right way, thus often influencing his associates to better effort from day to day and from year to year. Or, for want of the good seed, the child will be misled so as to exert a bad influence over his associates. Either way, good or evil, the development will move on in a geometrical progression that has been started by the teacher himself.

The child needs to be so trained that he will afterwards be able and ready to take part in any good cause carried on by the community. He needs to be drilled here first before he

can do well there. It is not wise to encourage him to work for the deaf only ; broaden his views of the great cause. For by so doing he will be pulling himself out of the mire of spiritual helplessness and prejudice, and then the other deaf less trained elsewhere will likewise be brought out and launched into activity and usefulness. To this praiseworthy end teach him all these lessons that are learned by the hearing child. It is a mistake to keep certain things away from him just because it is supposed that he cannot grasp them. By all means find some proper channel through which to pour new ideas into his soul. He should be so prepared that he will minister as well as be ministered to.

Teach and train the child so that when he goes out into the world he can stand up for the right, even at times when surrounded by the worldly and wicked. Consider the fact that so few religious services, or often none at all, as in many places over the country, are conducted for his special benefit and welfare. Have him learn how to walk and commune with God in spirit and truth, so that he will not feel so lonely in the wide world.

Would it not be well for the teacher, before proceeding with the very important work of training children in the way they should go, to look out and learn the true standing, collective and individual, of the silent people now wending their way through the world and struggling, in a dim way, with various aspects of life. Hardly can it be said of many of those who are annually sent forth into the world that they gather their daily manna from the written word of God. Not long ago I learned from a friend who has opportunities of observing and learning how the deaf people in general stand spiritually, in answer to my query, that very, very few read the Bible! From another person of a somewhat similar experience I received a statement to the effect that out of five hundred persons only two or three read the life-giving Word. But let me be surprised, like Elijah, to learn that there are more Bible readers and active workers among the deaf community than I suppose.

Two or three of the hindrances presenting themselves to the success of one's effort to bring children up in the love and fear of their Heavenly Father may be stated briefly in connection with the subject. If a person who has authority over several persons in any capacity whatever would have them love

one another and others in the spirit of the Lord, he should show himself loving in all possible ways, acting in accordance with the golden rule. Looseness in his manner of conversation may tend to weaken his influence over his pupils. Thought and conversation should be of careful, pure, ennobling, and edifying character, and as such should exert an influence in lifting the children up to the highest possible level of character, so that none will ever be suffered to go downward. To make some concession to one's whims or undesirable or unadvisable tastes means a step still lower for them. Therefore the teacher should use his dignity and good influence in the pursuance of his calling; he should be firm in conviction and duty, and yet be kind, patient, and pleasant in all conversation with the younger and weaker. Often fruitful sermons are preached in the chapel, leading many to think more seriously of their own condition, and in some cases to feel more persuaded than before, and yet, not long after, the indifference or thoughtlessness of some one of the teachers frustrates their serious inclinations. Were all those who are responsible for the education of children alike in experience and faith wonders would be performed in their midst.

The late Cardinal Newman made the following statement :

I have joined together faith and knowledge, and considered engagements in educational work a special pastoral office. When I was private tutor of my college at Oxford I maintained, even fiercely, that my employment was distinctly pastoral. I considered that, by the statutes of the university, a tutor's profession was of a religious nature. I never would allow that, in teaching the classics, I was absolved from carrying on, by means of them, in the minds of my pupils, an ethical training. I considered a college tutor to have the care of souls, and before I accepted the office I wrote down a private memorandum that, supposing I could not carry out this view of it, the question would arise whether I could continue to hold it. To this principle I have been faithful throughout my life. It has been my defence to myself, since my ordination to the priesthood, for not having given myself to parochial duties, and for having allowed myself a wide range of secular reading and thought, and of literary work.

At the conference of Protestant clergymen held in the rooms of the University of the city of New York, November 18th, 1890, and presided over by the late Dr. Howard Crosby, Rev. Arthur Brooks held that "it must be through our teachers that morality and religion must be inculcated in the schools through their personality."

Then let the force of these two bold assertions be repeated

with much power as essential to our work of educating the deaf child, even in the Lord, in whose name every good thing must be done, through whom every good result can be accomplished, from whom alone our help comes, without whom we can do nothing, and to whose glory all things should be done.

REV. PHILIP J. HASENSTAB, B. A.,
Instructor in the Illinois Institution, Jacksonville, Ill.

HOW HELEN KELLER LEARNED TO SPEAK.*

POSSIBLY I cannot better begin an account of the way in which Helen Keller was taught to speak than by reading a letter, written by herself, in response to my wish to know how it happened that she came to wish to speak:

SOUTH BOSTON, MASS., *April 3, 1890.*

MY DEAR MISS FULLER: My heart is full of joy this beautiful morning because I have learned to speak many new words, and I can make a few sentences. Last evening I went out in the yard and spoke to the moon. I said, "O moon, come to me!" Do you think the lovely moon was glad that I could speak to her? How glad my mother will be; I can hardly wait for June to come, I am so eager to speak to her and to my precious little sister. Mildred could not understand me when I spelled with my fingers, but now she will sit in my lap and I will tell her many things to please her, and we shall be so happy together. Are you very, very happy because you can make so many people happy? I think you are very kind and patient, and I love you very dearly.

My teacher told me Tuesday that you wanted to know how I came to wish to talk with my mouth. I will tell you all about it, for I remember my thoughts perfectly. When I was a very little child I used to sit in my mother's lap nearly all the time, because I was very timid, and did not like to be left by myself, and I would keep my little hand on her face all the while, because it amused me to feel her face and lips move when she talked with people. I did not know then what she was doing, for I was quite ignorant of all things. Then, when I was older, I learned to play with my nurse and the little negro children, and I noticed that they kept moving their lips just like my mother: so I moved mine, too, but sometimes it made me angry, and I would hold my playmates' mouths very hard. I did not know then that it was very naughty to do so. After a long time my dear teacher came to me, and taught me to communicate with my fingers, and I was satisfied and happy. But when I came to school in Boston I met some deaf people who talked with their mouths like all other people, and one day a lady who had been to Norway came

* Read before the meeting of the American Association to Promote the Teaching of Speech to the Deaf, at Lake George, New York, July, 1891, by Miss SARAH FULLER, Principal of the Horace Mann School, Boston, Mass.

to see me, and told me of a blind and deaf girl she had seen in that far-away land, who had been taught to speak and understand others when they spoke to her. This good and happy news delighted me exceedingly, for then I was sure that I should learn also.

I tried to make sounds like my little playmates, but teacher told me that the voice was very delicate and sensitive, and that it would injure it to make incorrect sounds, and promised to take me to see a kind and wise lady who would teach me rightly. That lady was yourself. Now I am as happy as the little birds, because I can speak, and perhaps I shall sing, too. All of my friends will be so surprised and glad.

Your loving little pupil,

HELEN A. KELLER.

The first intimation to me of Helen's desire to speak was on the twenty-sixth of March, 1890, when her teacher, Miss Sullivan, called upon me with Helen and asked me to help her to teach Helen to speak, "For," said she, "Helen has spelled upon her fingers, 'I must speak.' " As I had, nearly two years before, expressed my belief in the possibility of her acquiring speech, I was glad to know that she was to be allowed to make an attempt to use her vocal organs, and began immediately to familiarize her with the position and condition of the various mouth parts, and with the trachea. This I did by passing her hand lightly over the lower part of my face, and by putting her fingers into my mouth. She quickly appreciated that the teeth enclose the tongue, which fills the entire mouth cavity; that the tongue and lips are exceedingly soft and delicate, and very flexible; that the lower jaw moves up and down, and that the course of the trachea may be followed as it passes down behind the long framework of the chest. I then placed my tongue in the position for the sound of *i* in *it*, and let her find the point as it lay perfectly still and soft in the bed of the jaw, just behind the lower front teeth, and discover that the teeth were slightly parted. After this investigation, I placed one of her forefingers upon my teeth, and the other upon my throat or trachea, at the lowest point where it may be felt, and repeated the sound "*i*" several times. During this time, Helen, standing in front of me, in the attitude of one listening intently, gave the closest attention to every detail, and when I ceased making the sound, her fingers flew to her own mouth and throat, and after arranging her tongue and teeth she uttered the sound "*i*" so nearly like that I had made it seemed like an echo of it. When told that she had given the sound correctly, she repeated it again and again. I next showed her, by means of her sensitive fingers, the depres-

sion through the centre of the tongue when in position for the sound of "ä," and the opening between the teeth during the utterance of that sound. Again she waited with her fingers upon my teeth and throat until I sounded "ä" several times, and then she gave the vowel fairly well. A little practice enabled her to give it perfectly. We then repeated the sound of "i" and contrasted it with "ä." Having these two differing positions well fixed in her mind, I illustrated the position of the tongue and lips while sounding the vowel "ö." She experimented with her own mouth, and soon produced a clear, well-defined "ö." After acquiring this she began to ask what the sounds represented, and if they were words, and I then told her that "i" is one of the sounds of the letter I, that "ä" is one of the sounds of the letter A, and that some letters have many different sounds, but that it would not be difficult for her to think of these sounds after she had learned to speak words. I next took the position for "ä," Helen following as before with her fingers, and while sounding the vowel, closed my lips, producing the word *arm*. Without hesitation she arranged her tongue, repeated the sounds, and was delighted to know that she had pronounced a word. Her teacher suggested to her that she should let me hear her say the words *mamma* and *papa*, which she had tried to speak before coming to me, and she quickly and forcibly said "mum mum, pup pup." I commended her effort, and said that it would be better to speak very softly, and to sound one part of the word longer than she did the other. I then illustrated what I wanted her to understand by pronouncing the word *manma* very delicately, and at the same time drawing my finger along upon the back of her hand to show the relative length of the two syllables. After a few repetitions, the words *mamma*, *papa*, came almost with musical sweetness from her lips.

Notes of this and of all but two of the other lessons were unfortunately destroyed, so that I cannot give in detail an outline of the work with Helen from day to day. One of these two papers has no date, but I think it contains the second lesson. It records the vowels *ö*, *i*, *ä*, *ü*, *u*, and the consonants *m*, *b*, *p*, *n*, *d*, *t*, *k*, *g*, *s*, *r*, and *y*. The other, marked Fifth Lesson, records that I gave Helen the vowels *ü*, *ä*, *i*, *e*, *ï*, *ā*, *ó*, *û*, and *û*, which she was to practise with her teacher, associating them with the following words: cup, son, young; father, arm, aunt; pipe, pie, cry; me, eat, teeth; pin, baby, curtain; slate, nail,

day ; boot, rude ; foot, put ; tube, few. The consonants associated with words were *p*, in *cup* ; *b*, in *tub* ; *m*, in *come* ; *t*, in *cut* ; *d*, in *do* ; *n*, in *in* ; *c*, in *cuff* ; *g*, in *go* ; *s*, in *some* ; *f*, in *muff* ; *w*, in *one* ; *wh*, in *what*. The other consonants upon this paper, *v*, *r*, and the double consonants *tr*, *dr*, *br*, are not written with key-words, so I conclude that more drill upon them was needed before allowing her to use them in words.

The plan with her was this : to develop, at each lesson, new elements, review those previously learned, listen to all of the combinations she could make with the consonants as initial and final elements, and construct sentences with the words resulting from the combinations. In the intervals between the lessons she practised these with Miss Sullivan.

She really had but ten lessons, although she was with me at other times, talking freely, but not under instruction. She was an ideal pupil, for she followed every direction with the utmost care, and seemed never to forget anything told to her.

On the day she had her seventh lesson, she and her teacher were invited with me to lunch at the house of a friend. While on our way there Miss Sullivan remarked that she wished Helen would use the sentences she had learned, and added that she seemed very unwilling to do so. It at once occurred to me that the cause of her reluctance was her conscientious care to pronounce every word perfectly, and so, in the moments I had with her during our visit, I encouraged her to talk freely with me, while I refrained entirely from making corrections. She was much interested in the bric-a-brac in the various rooms, and asked a great many questions, using speech constantly, and when, just before we left the house, my friend took her upon his knee, she inquired of him about his boyhood, his studies, and his early home. She told him about her studies, and her home and family. Early in the day she had said to me that she would tell me of her visit to Dr. Holmes, and as I thought this a favorable time to listen to her story, I reminded her of her promise. Seeing that she was so much interested in what she was about to say that she thought of speech only as a vehicle for thought, I noted her words as she spoke them. There were, I think, but four which I did not readily understand, and those I asked her to spell upon her fingers :

One bright Sunday afternoon, a few weeks ago, I went to see a kind poet, named Dr. Holmes. He was sitting in his beautiful library, with a

great many books around him, and a cheerful fire. I think the poet must be happy with so many friends near him. Teacher told me that the Charles river was flowing beneath the library window. Dr. Holmes said that he loved that gentle river very dearly. I had read many of his poems and known some of them. I liked them very much. I liked them before I thought of putting my arms around his neck and telling him that he gave pleasure to me and all blind children, because his poems are in raised letters.

Dr. Holmes is an old gentleman. I talked to him and looked at the beautiful things, and he gave me a stamp-box. He showed me a picture of his house, and he gave me a picture of himself. The house was the house in which he wrote about in his poems, "The Opening of the Piano."

Her pronunciation of some words was peculiar because of her dividing them into syllables, as "lov-ed," "nam-ed," "plea-su-re." She did not hesitate in her attempts to pronounce any word that she wished to use to express her thought. In saying "good-bye" to an aged sister of the gentleman who had been spending the winter with him, she said, "He must have been very happy to have you here." Her enjoyment of this, her first experience in the real use of speech, was touchingly expressed in her remark to Miss Sullivan, when seated in the street car on her way home that afternoon, "I am not dumb now."

A still greater freedom in the use of speech was shown in a conversation which she held with Mr. Bell, Miss Sullivan, and myself two weeks later. We spelled our questions upon our fingers, but she replied orally.

Do you know what a cloud is ?

Rain.

What is rain ?

Moisture.

Where does the rain come from ?

From the ocean.

From the ocean : how ?

It falls down.

How does it come from the ocean ?

It rises up.

What makes it rise up ?

The waves—sun and waves.

Have you been upon the ocean ?

Yes : I went in a steamboat to Plymouth. The ocean is very large and deep.

What do you think about the wind ?

I think the wind is not as gentle as the breeze.

What is wind ?

Air. It is wild air.

Where does the wind come from, and where does it go to?

It comes from the waves beating against the shore, and it makes the wind.

Where does the wind go to?

Back to the water. When the waves are very gentle, it goes to the sea, deep, deep sea. When the sea is very gentle, then the wind stops and goes to another place. The sea is the mother wave of the wind and waves.

What is the sun?

Heat.

What is heat?

It is like a fire.

What is a fire?

It is heat.

Here is a hard question. What is thought?

When we make a mistake, we say, I thought it was right.

Are you thinking now?

I am trying to think. Sometimes we are thinking about something in our heads.

Is thought in your head?

Yes.

Where is your thought?

(Helen illustrated by describing the outline of her face and head, and then said): Mind. My head is full of mind. Ask teacher a question.

(Mr. Bell then spelled upon his fingers to the teacher, allowing Helen to follow.)

Does Helen dream?

(The teacher replied, spelling upon her fingers), Yes.

(Mr. Bell again spelled upon his fingers, saying), What does she dream about?

(The teacher spelled), Ask Helen.

(To Helen): Do you ever dream?

Yes.

What do you dream about?

About a very funny house. Last night, I dreamed about a very funny house. It was shaped like an orange and it was yellow. The beds were shaped like a pomegranate and the chairs were like balls with a flat seat. The tables were shaped like a triangle. (Helen illustrated by forming a triangle with her fingers.)

(Mr. Bell spelled), That was a funny dream. Were there any people in the house?

They did very queer things.

What?

They wore breastpins on their shoes.

Did they talk to you?

No, dear: I only thought about it. I was not one of them. They wore some bangles on their heads and rings on their waists.

How did you know they had rings on their waists? Did you feel them?

No: I only dreamed I saw them in the window.

Do you mean that you saw them with your eyes?

Yes.

Were you on the outside of the house?

I passed it and looked in.

Were the curtains drawn?

No; and it was very light.

What were the people doing?

They were throwing their handkerchiefs at each other and dancing. That was what they did. (Helen then illustrated by action.)

And were they talking?

No; they were only making funny sounds. (Helen illustrated.) Their eyes slanted down. (Helen illustrated.)

Could they see?

There were five eyes. One was in the middle of the head, one was on the nose, two were slanting (illustrated as before), and one was (pointing to the bridge of the nose).

Do such people live in Boston?

No; it was only a story.

Was it a dream, or a story?

Both.

She left Boston on the seventeenth of June to go to her home in Alabama. As this letter, which I received from her in October, tells me of her use of speech, it may be of interest to you:

TUSCUMBIA, ALABAMA, Oct. 20, 1890.

MY DEAR MISS FULLER: Oh, no! I have not forgotten you, dear friend! I have thought of you every day, and I love you more than ever. I will tell you why I have not written before. After I came home I was sick for awhile, and the doctor said I must be very quiet and not get tired or I would be very ill. We all went away to a beautiful mountain where it was cool and pleasant, and I did nothing but play, and ride my dear donkey. You must know I had a lovely time climbing the steep paths and gathering the pretty wild flowers. Lioness, my great faithful mastiff, always went with us. When we were tired and sat down on a fallen tree to rest, she would roll in the leaves or lie quietly at our feet. Sometimes the rain came down in torrents, then we stayed in the house and amused ourselves. Mildred and our little cousin, Louise Adams, were very happy together. I used to swing them in the hammock, and have fun with them. They could understand all that I said to them, and sometimes I could tell what they said by feeling of their lips. Are you not delighted because I can speak so well? My dog comes bounding to me when I call her, and all of my friends know what I say if I speak distinctly. I have learned a great deal about my loving heavenly, and the dear Christ. I am very very happy. God wants us to be happy. I think He wanted you to teach me how to speak because He knew how much I wished to speak like other people. He did not want his child to be dumb, and when I go to him He will let his angels teach me to sing. I wonder if your beautiful new

school is finished. You must give my dear love to all the children and the teachers. I hope they have not forgotten Helen. When I see you, I shall much, very much, to tell you. I am studying every day, and learning all I can about plants, and numbers, and the beautiful world our Father has given us. I am so glad that we shall live always, because there are so many wonderful things to learn about. Teacher sends love, and little sister sends a kiss. Lovingly, your little friend,

HELEN A. KELLER.

TECHNICAL TRAINING.

It is now almost three-quarters of a century since the first school for the deaf in the United States was founded at Hartford, Connecticut. The results of its establishment to the deaf of America have been sufficient to enbalm forever in their hearts the name of Thomas Hopkins Gallaudet, and to call forth tributes of the highest respect and admiration from all true lovers of mankind for the character and labors of that noble man. When he was laid to rest one of his sons took up his work, and by the establishment of the National Deaf-Mute College proved to the world that the deaf need not stop at the common school, but may go onward and upward into the highest realms of thought and investigation.

This noble institution has done much for the deaf in a general way. From within its walls nearly two hundred young men have gone forth into the world to make their fortune. It has also begun to do something for the profession by the introduction of a Normal Department in the form of six Normal Fellowships.

But great as its benefits are to those for whom it was founded, there still seems room for further improvement in its educational functions. We mean that the time has evidently arrived when technical training ought to be given those who desire to follow other callings than that of teaching. To this end such departments as those of Civil and Mechanical Engineering, Electricity, Business, etc., should be created, thus giving to the College something of the character of a university, by means of which students may prepare themselves to step from the College directly into some profitable employment, instead of having to go elsewhere for preparation. There can be no question as to the utility of this suggestion. The College is the only institution that offers a higher education for the deaf,

and, so far, it is the only place where they can be conveniently educated, whether one or many.

A general course of study, while it disciplines and broadens their minds and develops their characters, gives them very little opportunity to pursue a higher calling or compete with the hearing. "Our idea of education," as we have said elsewhere, "is not that of a mind full or half full, but an active mind, well disciplined by close study and observation, liberalized by the influence of a college training, or something like it, and having a few correct ideas, at least, of the work it undertakes." To the great majority now-a-days, education means a vast deal more than mere culture. The Normal Department just referred to is but another illustration of how teachers may be equipped to enter intelligently and successfully into their life-work. Why should not the deaf be given an opportunity, even at some additional expense, to stand a fair chance in any of the other callings in which they may choose to engage? From the nature of the case it would appear that this would be one of the first steps in the higher education of the deaf.

That there is a demand for some such change is apparent from the tendency of the deaf in recent years to seek a livelihood in more various callings of a special kind. Such an arrangement in the College would greatly enlarge its usefulness and enable many deserving young men to prepare themselves for more lucrative, independent, and honorable callings in life. No doubt some now at the College would take advantage of it, and many others in our institutions would be glad to avail themselves of such an excellent opening into new fields of labor. The demand for deaf teachers is not very large, nor does it seem at all likely, from present appearances, that there will be any increase in the demand.

The conditions of admission to any department ought not to exceed a good common-school education, with a fair command of language, and departments should be open to students before or after their graduation.

Were it less expensive and more convenient for the deaf to take special courses in hearing universities, there would not be so much need of such departments; but it is neither, as the experience of some and the discussion of the subject have recently proved. So far, with the exception of teachers, only the well-to-do and those placed in exceptionally favorably cir-

thousands of persons, and lasts several days. On the organization of the Connecticut branch of the Universal Peace Union he was made its president, and held the office until his death.

His correspondence was wide and voluminous. He is said to have written more than three hundred personal letters to solicit subscriptions for the *Voice of Peace*—now the *Peacemaker*—the official organ of the Universal Peace Union. This journal was for a time published by the Whipple family, Zerah C. Whipple and his sister Content, grandchildren of Jonathan Whipple, acting as its editors. In passing, I will add that Content Whipple, who died some years ago, was the author of two excellent books, "The Newell Boys" and "The Prescotts," and of numerous articles published in the newspaper press of the period.

The letters of Jonathan Whipple were epistles of counsel, encouragement, and admonition. Among his correspondents were the late Adin Ballou, of Hopedale, Massachusetts, and Alfred H. Love, of Philadelphia, president of the Universal Peace Union.

Besides his other labors, Jonathan Whipple taught for years the private school formerly maintained by the sect of which he was a member.

In person, the subject of this sketch was tall, spare, muscular, with dark eyes, strong features, and close, curling black hair mingled with silver. His manner was dignified; at times reserved, and even austere. He possessed a powerful penetrative voice, which could modulate itself to a cadence of gentle and pathetic sweetness. He was singularly emotional, and could hardly address a religious assembly without being moved to tears. He was a most graphic story-teller. I once heard him relate an experience of his in reclaiming a drunkard, and was so impressed with the moral and dramatic interest of the story that I wrote it down almost word for word as it fell from his lips and had it published in a local paper. His hospitality was well-nigh boundless. His home was an asylum for the re-former, of whatever creed or color. The sunny, gambrel-roofed farm-house, with its dormer windows, its thrifty screen of woodbine on the southern wall, and the plain but substantial cheer inside, was a very haven of rest to the weary wanderer.

It will be seen that Jonathan Whipple's work for the deaf was but one of many interests and activities. His belief in the latent power of speech and susceptibility of speech-cul-

ture possessed by the deaf met with determined opposition. But he lived to see this belief become a widely-recognized fact, and to reap, in the Home School for the Deaf, established by the united efforts of himself, his son, and his grandson, a seed-harvest, as the reward of his labors in this field.

IDA WHIPPLE BENHAM,
Mystic, Conn.

MORAL EDUCATION.

“EDUCATION is the sum of the reflective efforts by which we aid nature in the development of the physical, intellectual, and moral faculties of man, in view of his perfection, his happiness, and his social destination.”

Such, as expressed by one of our modern educators, is the comprehensive scope of a teacher's work. This broad idea of education is by no means a modern one. Read educational treatises from Plato down to the present time, and, variously expressed, will be found this same ideal—the perfection of human nature. It must be admitted, however, comparing practice with theory, that this has been largely the mere dream of educators. We all acknowledge, in a general way, that our aim is to produce the complete, the perfect man. But it seems a trifle strange that in our efforts toward this end we should still have so poor an idea of proportion.

Physical training, after long neglect, is coming more and more into prominence. Many schools are endeavoring to supplement mental development by such exercises as shall secure a sound mind in a sound body, and, doubtless, this training is destined to receive yet more careful attention in future years.

There is another part of the nature requiring culture—a part of still higher importance than this. One has only to look through educational journals and see the multiplicity of articles on methods of language teaching, methods for teaching arithmetic, grammar, geography, with (perhaps) a few words on moral training, to realize that this part of education is slighted or teachers are strangely silent concerning it.

Step into a live school-room for a few moments. The teacher will be eager to explain his carefully-planned work for the day, his new ideas, his reasons for this and that kind of training: but do you often hear any definite plans for developing this

weak little moral nature, a logical scheme of discipline, a reason drawn from the nature of the child for every punishment administered? Johnny is guilty of some misdemeanor. He is promptly shaken, whipped, or sent into the hall. It would have been quite the same with Catherine or Lucy. Perhaps the punishment is suited to the offence; more frequently it is not. The teacher did not take time to consider the reasons of the case.

The ambitious teacher keeps his pupils working up to the limit of their ability, that their minds may develop as rapidly as possible. Is there often seen equal ardor for the development of high moral character? Is character building made the supreme end of education? We act in accordance with our characters. To act well is of more importance than to think well. It is true that moral development is partly dependent on intellectual training, but by no means entirely so. History abounds with instances of wise men who were not good.

It may be claimed that this development is largely the result of a constant "silent influence." A great deal of it is silent—too much so. Are there no methods of moral training? Can we always trust to the inspiration of the moment, to our general ideas on this subject, to impel us to the wisest course? Do we not need preparation, study, advance, in this line as well as for mind-training? This part of education needs system as much as any other. Hap-hazard discipline will produce hap-hazard results in character. To possess the "good moral character" a teacher's certificate vouches for is not sufficient to insure like characters in pupils. There is need of special personal care, aiming at the moral bent of each child.

It is not easy to outline a scheme of morals for the school-rooms of others, because what is applicable to one average age and one class may be far from adapting itself to others.

In this, as in every other department of education, there are fundamental principles which must be left to the intelligent teacher to apply variously. Merely to know the plans of others is of benefit in formulating or correcting our own.

For the same reason that we count careful mental training of the first importance in the primary class, so also should the early moral education be most judiciously conducted. The beginning class is the most interesting and instructive place to study the child. He can there be observed before his native

simplicity has been seriously influenced by fashions, conventionalities, or the arts of society. Some tenacious habits have already fastened themselves upon the child before he enters school ; but, in the main, the habits of a life-time are yet to be formed, and the whole nature is open to study.

This very simplicity is the stumbling-block of many who lack the ready sympathy to place themselves on a level with the child. With our own elevated ideals and complex ideas of duty, we often judge childish actions with undue severity because it is so hard to understand a child's moral state.

Doubtless, an intelligent analysis of the little one's nature at the time he first comes under the teacher's care would show some tendencies wholly bad ; tendencies inherited from a more or less corrupt ancestry. These are naturally deep-rooted and tenacious of life, and must be dealt with accordingly. Other traits we deplore do not in themselves argue depravity, but merely lack of knowledge. A liberal appropriation of one another's sponges, books, and pencils among very young pupils is not often theft in the proper sense. The pure property idea is hardly developed yet. It is difficult to determine just what the child's idea is in such a case ; whether, in his vague way, he regards this as a delightful world, where all things are held in common, or whether, from over-indulgence at home, he thinks everything belongs to himself. Another common trait, falsehood, is not so often a natural fault as one cultivated by our own well-meaning efforts to secure rectitude. A slate is broken in our absence from the class-room. With a mien calculated to strike terror to the childish heart, we inquire who committed the offence. If the offender has sufficient courage to acknowledge his misdeed, a sharp punishment, " which he will remember," is sufficient to insure his denial of the next offence. He does remember the punishment, not only as the consequence of the misdemeanor, but also of his confession. A word of caution, then, is necessary lest we cultivate the very fault we desire to uproot, through the culprit's fear of punishment. Confession should materially mitigate the administration of justice.

We often unwittingly make duty requirements of children when our analysis would show us no development of the duty idea, or, in fact, of any of the higher sentiments which must actuate them in after life.

A comprehensive survey of the conditions, so far as they are

known, is necessary to intelligent, systematic training. We have found in the average moral nature (1) some evil tendencies inherent in the disposition; (2) a more or less dense ignorance of the Christian code of morals; (3) the abstract idea of duty unawakened; (4) the higher sentiments—love of truth and the good, taste for the beautiful, etc.—largely dormant. These natural conditions will, at least, indicate the lines along which the educator must work. The soil contains nature's weeds to be rooted out, and nature's seeds to be developed. The most elevated character ever evolved lay in embryo in the child. Germs of all the virtues we can hope to cultivate are dormant in the nature, waiting for the season and the husbandman. Otherwise our utmost efforts are fruitless.

The ideal of character towards which our training will unconsciously tend is of the utmost importance. Every one has an ideal, doubtless more or less vague, in his own mind. It would be startling, and perhaps sad, if our various ideals of school-boy character were to materialize and appear in human form. Some of them would be mere automatons of obedience and order, some dwarfs, some giants; all of them somewhat deformed.

Obedience to outside authority is not to be depreciated. Yet a child may be a model of obedience, and at the same time have little power to control or direct himself. A far higher aim is to develop moral beings, who have in themselves their rules of conduct, who apply such rules to daily life by their own wills, and who will only that which is noble and good. Let our ideal be a high one, even though its approximate accomplishment be the work of years.

In view of the conditions before us and the results to be obtained, how can we best proceed to the training? Any definite plans which have met with success in particular classes would be only suggestive. If a teacher is worthy of his position, he is capable of applying general principles in his own way.

As the first requisite of success under any plan, a teacher must possess the virtues of heart and will which he attempts to inculcate. This is not mere moral cant. A teacher's faults will unconsciously appear, even though he thinks pupils never get a glimpse of them. A radical weakness may be so concealed as not to show itself in its distinctive colors. But it

simplicity has been seriously influenced by fashions and artificialities, or the arts of society. Some tenacious habits have already fastened themselves upon the child before school; but, in the main, the habits of a life-time are formed, and the whole nature is open to study.

This very simplicity is the stumbling-block of many. We lack the ready sympathy to place ourselves on a level with the child. With our own elevated ideals and concepts of duty, we often judge childish actions with undue severity because it is so hard to understand a child's moral nature.

Doubtless, an intelligent analysis of the little one at the time he first comes under the teacher's care will reveal some tendencies wholly bad; tendencies inherited from a more or less corrupt ancestry. These are naturally deep-seated and tenacious of life, and must be dealt with accordingly. Traits we deplore do not in themselves argue a mere lack of knowledge. A liberal appropriation of another's sponges, books, and pencils among very young children is not often theft in the proper sense. The power of reasoning is hardly developed yet. It is difficult to detect the child's idea in such a case; whether, from a natural inclination, he regards this as a delightful world, where anything is in common, or whether, from over-indulgence, he thinks everything belongs to himself. A notion of falsehood, is not so often a natural fault as we suppose. Our own well-meaning efforts to secure respect for property broken in our absence from the class-room may be calculated to strike terror to the childish heart if he has committed the offence. If the offender is of an age to acknowledge his misdeed, a sharp rebuke, "he will remember," is sufficient to insure a knowledge of the offence. He does remember the punishment and the consequence of the misdemeanor, but he does not understand it. A word of caution, then, is necessary. We cannot remove every fault we desire to uproot, through punishment. Confession should meet with a liberal administration of justice.

We often unwittingly make duty more difficult when our analysis would show us no fault, or, in fact, of any of the higher qualities that should actuate them in after life.

A comprehensive survey of the con-

nection between the two occurrences was at least suspected. Virtues and all commendable deeds may be represented in actions with profit, both for moral and language purposes. But remembering the susceptibility of the young imitator, it is a grave question whether we can safely represent the opposite characteristics. There is the same danger of harm here as in looking frequently upon any vice—

Seen too oft, familiar with her face,

We first endure, then pity, then embrace.

In this strong, imitative instinct of child nature there is also an argument for reducing severe discipline to its minimum in the lower grades. It is some time before a child understands the source and limits of a teacher's authority. He considers what the teacher does as right and good for himself to do. Recently, in a class of beginning pupils, the teacher, after shaking a little offender, was horrified to see several of the pupils shaking each other vigorously. Later, she had scarcely finished the punishment of a graver offence, when a little fellow promptly turned one of the girls over his knee and proceeded to administer a similar chastisement. It was hard, in fact impossible, to explain to this urchin how his act was wrong and the teacher's right. These were doubtless very marked cases; but they illustrate a principle of every-day application.

In addition to this contagion of good which exercises a general influence on the character, there are other means to be used; special treatment for special cases. It is not always sufficient to let the nature grow towards the light. There are weeds that will grow with the good seed. In nearly every nature there are some bad tendencies which refuse to yield to general influences. In one it may be falsehood; in another, indolence; in another, theft. Do not deal impatiently with these. As a general rule, evil can be opposed by favoring the good. The easiest way to correct an evil inclination is to fortify a good one. Far more can be done with the indolent child by exciting him to labor than by continually telling him how lazy he is and how tired we are of his slothful habits. As far as possible, faults should be uprooted, not by main force, but by cultivating the corresponding virtues in their stead. With an untruthful child, it is not the wisest way to prate upon his sin of lying, and the bad end to which he will come if the habit be continued. It is better to let him see marked approval of truth and truthful children; adroitly to

arrange circumstances so that it will be easy for him to tell the truth, and let him see the pleasure it gives you to have him do so. In the majority of cases, the good habit will be fortified without much repression of the evil one. But occasionally there are cases where we cannot substitute and must repress. Here comes the use of discipline with its means of punishment and force. It should be remembered that this is a last resort, and not the regular training.

There is a broad subject in itself under our third head—awakening the moral consciousness. It is impossible to tell just when or how the abstract ideas of good and bad are developed in a youthful mind. The complete conception is surely the product of an evolution covering years of the early life. Probably, the primitive idea of good is what pleases the child, and bad what displeases him. With many of our deaf pupils, this is as far as the evolution has gone previous to entering school. Their every wish has been gratified by indulgent parents: their own pleasure has seemed to them good and right.

But in the course of school life another step is taken, and the good becomes what is commanded: the evil, what is forbidden. The variety of experiences in his daily life ere long advances the learner another step; good is seen to be the useful and evil the hurtful. Finally, after a period varying in individual cases, good in its highest form is found in fulfilling the requirements of the moral law.

In our failure to comprehend childish nature, the ultimate conclusion—duty—is made the first requirement, forgetting that this abstract idea is one of the last to evolve itself. How best to conduct the evolution from one stage to another of the development is a serious question. Instead of setting up our own inflexible standards of right and compelling conformity thereto, a little adroitness will enable us so to arrange circumstances that the child's pleasure and good shall frequently coincide, and wrong shall in itself seem unpleasant. To know the good will never be sufficient. The child must come to love it. We contribute towards this end, as well as conform to his primitive ideas, by letting his pleasure and the right coincide as little as possible.

Advancing to the second point, it is highly important that a teacher have every child's love, in order that his commands be obeyed. Children do not come to know and love

truth by obedience to despotic commands. The teacher who approaches a child with firm, set lips and angry mien may make him tremble and obey for the time, but the forced obedience will be of little permanent benefit. The moral nature can be reached through the sensibilities long before the intellect is sufficiently awakened to admit of reason.

Having once gained the pupil's love and willing obedience, it becomes a power for developing good habits. These are of the first importance. It is hard to suggest abstract ideas of duty, but easy under these circumstances to accustom children to the habitual performance of certain duties. This will be a great point gained ; for from habits will be evolved principles ; from the practice of duty, the duty idea.

At the same time that we are insinuating good habits into the child's daily life, we should see that he is being prepared for the next step in advance, by allowing his own experiences to show him the consequences of things. There are many every-day occurrences in which, through our impatience for results, we interrupt the pupil and tell him the impending mistake, when it would be better to allow time for the act to develop its own hurtful or unpleasant consequences. Aside from making a more serious impression, such experiences show the child that necessity lies not in the caprice of his teacher, but in things themselves. It is going too far to suppress all commands. Some things which the unrestrained will would dictate are absolutely harmful, or would only develop their consequences after too long a time. In such cases the restraining power of the teacher must be exercised. Judgment is materially strengthened by the discipline of consequences. The child early learns to make decisions concerning actions which he is to perform at his own risk, and thus the idea of responsibility is developed. When children are accustomed by such experiences to think and act for themselves, to judge of the actions of others, conscience will soon appear and true moral responsibility begin.

Something has already been said regarding the development of the higher sentiments. Aside from giving children the example of the most unwavering veracity, it is also well not to tempt them to falsehood by requiring confession in cases where self-interest or fear inclines strongly to denial. Falsehood can also be discouraged by showing loving confidence in those who are truthful and so inciting all to seek such approval.

Pictures, flowers, and various little school-room ornaments afford opportunity to cultivate the love of the beautiful.

It is not the whole of the work to enlighten the intelligence and develop the moral consciousness. To know the right is not always to have the will power to do it. Some special attention must be given to training the will. Coercion—forced obedience—except in extreme cases, weakens will power instead of fortifying it. A will should be opposed only when its indulgence would lead to positive harm. It is not necessary to destroy childish desires in order to bring a will into accord with ours. This was the mode of operation in the old process of breaking the will. The child of weak sensibilities and feeble desires develops but little energy of mind. Ardent inclinations usually indicate vigor both of intellect and character. While we must sometimes make special effort to excite desires, the important thing is adroitly to direct them. Forcing a pupil to do a thing is occasionally necessary: but it is better ingeniously to lead him to want to do it.

Fred is a quick-tempered, ardent little fellow, who has been under discipline long enough to know school-room sentiment regarding blows. But he is impulsive, and, in a moment of anger, gives Nellie a sharp blow on the cheek in return for a trifling annoyance. The offence must be atoned for. With determined look and firm-set lips, the teacher advances to the culprit and commands him to ask Nellie's pardon, emphasizing the decree by a vigorous shake. Fred meant the blow and sees no reason for changing his mind, so still refuses. But finally, half driven by threat of punishment and half pulled by main force, he goes through the form of an apology, then rushes back to his seat with eyes full of angry tears, and in his heart a resolve to be fully revenged at the first opportunity. Suppose the teacher makes no demand for an apology, but shows by a reproachful look how grieved she is. If Fred loves his teacher, this alone will check the heat of his passion. He is sorry to have grieved her. Then putting her arm around Nellie, the teacher points to the little red cheek where marks of the blow are still visible. After the little fellow has had time to form a judgment, he begins to feel ashamed and would really like to make some atonement, but is too proud to make a start. So, softly stroking Nellie's cheek, the teacher takes hold of Fred's arm, not to compel him to come, but to give impetus to a determination already forming. In nine cases out of ten, the

penitent will, of himself, resolve and do the right thing. His moral judgment will have been developed, his power of determination strengthened, and a serious impression made which will guard against a repetition of the offence.

And here we reach the highest point in our course of moral training—to unite duty and inclination, to associate will and desire, to bring the child to know, love, and will the good. The limits of this article will not admit a discussion of the subject so closely related to morals—the awakening and culture of the religious sentiment. Inseparable as it is from the perfect moral development, no teacher can afford to ignore it or relegate it to the brief Sunday-school hour. It should be a part of the child's every-day training.

“It is not a soul nor yet a body which we are educating, but a *man*, and we must not divide him, and, as Plato says, we must not train one of them without the other, but we must drive them abreast like a span of horses harnessed to the same shaft.”

ESTELLA V. SUTTON,
Instructor in the Pennsylvania Institution,
Philadelphia, Pa.

A WORLD'S CONGRESS OF TEACHERS OF THE DEAF.

THE great Expositions of the world have heretofore given attention to material forms and things only. These are but the physical expression of the talent and skill of their makers. A new departure is to be made at the time of the World's Columbian Exposition of 1893, in the city of Chicago, by which, not for exhibition, display, or advertisement, but for consultation and mutual improvement and greater co-operation, there will be brought together the great and earnest minds of the world engaged in every branch of human endeavor. Such congresses do not come within the scope of the Exposition, but public-spirited men connected with it have organized a Congress Auxiliary with this end in view. They have the most hearty encouragement and co-operation of the managers of the World's Columbian Exposition.

Immense auditoriums, capable of seating as many thousand people as one voice can address, will be erected on the Lake Shore Park, near the hotels and centre of the city. Convenient

to these will be many smaller halls for congresses of persons interested in special subjects, so that upon the close of a session of a great convention of educators, scientists, philanthropists, etc., etc., twenty or thirty sections can at once repair to these halls and take up the consideration of such subjects as interest them. This will, doubtless, bring together such an assembly of the great, the good, and the wise as has never before convened on this planet, if, indeed, it has ever before been conceived. It will be the grandest feature of the months of the Exposition. It will be as much more interesting than the Exposition as a man is superior to the things he makes. Nothing has ever occurred to witness which, and join in, one might more justly journey from remote parts of the earth than this gathering of the world's master-minds.

The officers of the World's Congress Auxiliary of the World's Columbian Exposition are Hon. Charles C. Bonney, President, Hon. Thomas B. Bryan, Vice-President, Mr. Lyman J. Gage, Treasurer, and Hon. Benjamin Butterworth, Secretary, all of whom are also officially connected with the Exposition.

These gentlemen have requested parties living in or near Chicago to act as committees upon special subjects, and prepare addresses to the various professions and classes engaged in advancing human knowledge and uplifting mankind. The writer has been requested to act as chairman of a committee on congresses of Instructors of the Blind, the Deaf and Dumb, and the Feeble-Minded. In this capacity, in conjunction with Dr. Noyes and Mr. Swiler, he has prepared an address to the teachers of the deaf throughout the world, a copy of which may be found in this number of the *Annals*.

PHILIP G. GILLET, M. A., LL. D.,
Superintendent of the Illinois Institution,
Jacksonville, Illinois.

AN ECUMENICAL CONGRESS OF INSTRUCTORS OF THE DEAF.

*To the Instructors and Educators of the Deaf
throughout the World, Greeting:*

The undersigned have, by the World's Congress Auxiliary of the World's Columbian Exposition, been appointed a Special Committee on Instruction of the Deaf, and in this capacity now address you.

One of the greatest events of the nineteenth century, and one which will mark an important epoch in human progress, will be the World's Columbian Exposition to take place in the city of Chicago, U. S. A., in the year 1893, which will be the most extensive and comprehensive exhibit the world has ever seen. The corporation which will conduct this Exposition has been organized under the laws of the State of Illinois, and has been recognized by act of Congress.

The Exposition will embrace a physical exhibit of all departments of human progress. The World's Congress Auxiliary of the World's Columbian Exposition is an organization to bring together the prominent workers in all departments of human skill, art, education, and philanthropy, without whom the materials for the World's Columbian Exposition could never have existed. If the physical exhibit is of great importance, who shall measure the importance of congresses of the authors, the architects, and the makers of the exhibits, or of the men and women who so taught and trained them that their exhibits not only became a possibility, but an actuality?

In its first report the Auxiliary announces its object to be:

To promote the holding of appropriate conventions during the World's Columbian Exposition of 1893, for the consideration of the living questions in all the departments of human progress, and, in addition thereto, a Union Congress for each department, under the direction of the Auxiliary, in which the important results accomplished will be set forth by the most eminent representatives who can attend, thus securing freedom and independence of separate organizations, and union and harmony in presenting to the world the higher achievements of mankind: while the people who will come to the Exposition may enjoy the privilege of seeing and hearing many of the distinguished leaders whose names have become familiar to the enlightened world.

Not Things, but Men.

This Auxiliary has no jurisdiction over any exhibit of material things, but will deal exclusively with conventions of persons and their proceed-

ings. The Exposition will present the progress of mankind as represented by material forms; while the Auxiliary will portray the progress with the pen and the living voice, and will endeavor to crown the whole glorious work by the formation and adoption of better and more comprehensive plans than have hitherto been pursued to secure the progress, prosperity, unity, peace, and happiness of the world.

Not Matter, but Mind.

To provide for the proper presentation of the intellectual and moral progress of the world, in connection with the Columbian Exposition of 1893, in a series of World's Congresses, under the auspices of the Auxiliary, with the assistance of the leaders in all the chief departments of human achievement.

To provide places of meeting and other facilities for appropriate organizations to hold conventions in Chicago at a convenient time in the Exposition season of 1893, for the consideration of the living questions pending in their respective departments.

To arrange and conduct a series of Union Congresses to present to the people the most important results attained in the several departments of civilized life, voiced by the ablest living representatives whose attendance can be procured.

To provide for the proper publication of the proceedings of such congresses as the most valuable and enduring memorial of the World's Columbian Exposition of 1893.

To bring all the departments of human progress into harmonious relations with each other in the Exposition of 1893; to crown the whole glorious work by the formation and adoption of better and more comprehensive plans than have hitherto been made to promote the progress, prosperity, unity, peace, and happiness of the world; and to secure the effectual prosecution of such plans by the organization of a series of world-wide fraternities, through whose efforts and influence the moral and intellectual forces of mankind may be made dominant throughout the world.

The original announcement of the object of this organization declares:

Among the great themes which the Congresses are to consider are:

Educational systems, their advantages and their defects, and the means by which they may best be adapted to the recent enormous increase in all departments of knowledge.

The most efficient and advisable means of increasing productive ability, prosperity, and virtue throughout the world.

The announcement further states:

It is impossible to estimate the advantages that would result from the mere establishment of personal acquaintance and friendly relations among the leaders of the intellectual and moral world, who now, for the most part, know each other only through the interchange of publications, and perhaps the formalities of correspondence. And what is transcendently more important, such Congresses, convened under circum-

stances so auspicious, would doubtless surpass all previous efforts to bring about a real fraternity of nations, and unite the enlightened people of the whole earth in a general co-operation for the attainment of the great ends for which human society is organized.

A General Committee on Educational Congresses has been appointed, of which the Hon. and Rt. Rev. Samuel Fallows, D. D., LL. D., is chairman.

Special Committees on Higher Education ; on Public Instruction ; on Public Instruction in Music ; on Special Education ; on Instruction of the Feeble-Minded ; on Instruction of the Blind ; on Instruction of the Deaf, have also been appointed. The last named Committee, consisting of Dr. Philip G. Gillett (Superintendent of the Illinois Institution for the Education of the Deaf), Chairman ; Dr. J. L. Noyes (Superintendent of the Minnesota School for the Deaf), and Prof. J. W. Swiler (Superintendent of the Wisconsin School for the Deaf), desire to hear at as early a date as possible from all workers in this department of education in all parts of the world, and invite suggestions to be freely given by such workers with reference to conventions of experts in the department of education in which they are engaged.

It is hoped, through the Department of State, which has manifested the greatest interest in the Columbian Exposition and all related to it, to secure the co-operation of foreign governments in encouraging the fullest possible attendance of the instructors of the deaf throughout the world upon the World's Congress of such educators. An Advisory Council, composed of eminent workers in all parts of the world, will be appointed and announced at an early day.

The preliminary suggestion of arrangement of the Congresses provides for groups of Conventions in the months of May, June, July, August, September, and October, 1893. One group comprises science, philosophy, invention, and education, including Congresses of Colleges, Universities, Teachers, Superintendents of Schools, Astronomers, Archæologists, Botanists, Chemists, Electricians, Ethnologists, Geologists, Geographers, Mineralogists, Metallurgists, Zoologists, etc., etc.

As our work is educational, our convention will bring us together with most interesting classes of specialists.

In a general way, it may be said that the subjects to be discussed at the World's Congress of Teachers and Friends of the Deaf will not be such as delve into the past so much as living

scientifically to apply his methods, so that one mind acts through many."

We must not forget that we have everything to teach these deaf children, and but a limited time in which to accomplish it. Teachers may differ widely and argue until doomsday as to the what, how, and why of teaching; but it cannot be gainsaid that in a school where all the teachers unite their efforts in one general direction, the standard of success will be higher than in one where the instructors are left to act more independently of one another and more in accord with their individual inclinations.

By far the best and most elaborate course of study that has yet been prepared in any school for the deaf is the one under consideration—that of the Ohio Institution for the Deaf, arranged by Robert Patterson, M. A., the principal of the school. It reflects the highest credit upon Mr. Patterson individually, and upon the school that he represents. Though prepared for the teachers of a particular school, there is no teacher in the country that would not be aided and improved by a careful study of it.

It is designed to cover a period of ten years, represented by ten grades. Each school year is divided into two terms of twenty weeks each. The work for each term is arranged separately, making in all a course for twenty terms.

The Course, as it stands, is not perfect, and it would be unreasonable to expect anything of the kind to be so. But it is as far advanced on the road to perfection as anything we have seen in that line. Especially commendable is the attention paid to "Manners and Morals." From the nature of the case, deaf children can receive very little training on these points at home; hence so much the more responsibility devolves upon the teacher. Mr. Patterson emphasizes this carefully throughout the Course.

Language, as is eminently fitting, has the place of chief importance in the plan. Probably the most natural criticism is that more has been prescribed in this line for each term than can well be taught. Such an objection is hardly valid. It is certainly better to have the plan too broad than too narrow. Teachers will naturally teach as much as they can, and when there is plenty to select from, they will be less hampered in their action.

In regard to the order in which Mr. Patterson introduces

hence the directors of a public school are never under the necessity of employing raw inexperience. Not so with the teaching of the deaf. Until the present year we have had no normal training schools, except for articulation teachers, and it will be some time before the number of the graduates of the National College Normal Department will be large enough to supply the demand for new teachers. When the head of a school has a vacancy to fill, two courses are open to him. He can entice an experienced teacher from another school by the inducement of a higher salary, or he can choose a person of inexperience in the work. It is doubtless true that, as a rule, a successful teacher of hearing children will make an equally successful teacher of the deaf in due time. But none the less is a special training necessary, inasmuch as the former commences with pupils who have a comparatively fluent command of language, while the latter has to commence at the very beginning.

In the majority of schools for the deaf, the arrangements are such that the superintendent, or principal, is unable to give much of his attention to the instruction of inexperienced teachers, even when, as is not always the case, he is fitted to do it. And here is where the importance and usefulness of the comprehensive course of study are made manifest. It embodies, as may be said, the entire experience of the school. It is carefully and thoughtfully prepared by those whose long experience and close study of the subject have taught them what is needed. Placed in the hands of an inexperienced teacher, it offers something definite to follow; and instead of groping in the dark, as it were, and wasting weeks and months of valuable time in experimenting, the work can be taken up intelligently and carried on in harmony with the general plan.

Aside from being a guide for the less experienced instructors, a course of study serves the all-important purpose of producing unity and co-operation when it is intelligently followed by the whole corps of teachers. An Englishman, a teacher of the deaf of long experience, visited the school at Riehen, Germany, which was under the management of Mr. Arnold, one of the most successful educators in Germany. In speaking of his impressions, he said:

“The school at Riehen is an impressive illustration of what may be done by a united and intelligent body of teachers, who may have confidence in the director, and are resolved con-

“It seems to have been a good game.”

Considering that the pupils are but just in their fourth year, and have six years remaining, we think such expressions as the above could well be postponed until later. It is also recommended in this same grade to teach the Roman notation to one hundred. Is there any practical demand for it thus early?

In the Fifth Grade (fifth year) text-books on geography and history are taken up. In a ten-year course, and with an average class, this is rather early. Children in the public schools hardly take up such studies before the fourth year, and consider the command of language they have before they enter school. In the Minnesota course those branches are commenced one year later, with text-books, and our experience has proved that in many cases a still further delay would not be amiss. One serious omission made in the matter of text-books is, that no suggestions are made in the course as to how they should be used. The transition from the language to which the pupils have been accustomed to the language of text-books is somewhat abrupt, and there is danger that the inexperienced teacher may handle a text-book at the beginning in such a way as to cause positive injury to the children.

One rather notable lack in the Course is in regard to reading. Little or no mention is made of it as a factor in language teaching. Nothing receives more attention in the public schools than reading. It forms a part of the daily exercises throughout the pupil's school life. It should have fully as important a place in the education of the deaf, for we know that in reading lies almost the only hope a deaf child has of continued advancement in the acquisition of language.

Next in importance to language in the educational scheme comes arithmetic. We think that the Ohio Course passes over it all too briefly, especially in the earliest grades. The annals of the National Deaf-Mute College will show that candidates for admission have failed more often in arithmetic than in other studies. Hence, in a course of study designed to be preparatory to the College, arithmetic should receive fuller attention.

Our Ohio friends have a very excellent plan for Sunday work. We would only suggest that introducing the Lord's Prayer in the first year, and requiring the memorizing of the Ten Commandments in signs in the second year, especially the latter, might well be deferred until the moral nature of the

pupils is better fitted to appreciate the principles involved. Nor would we advise the introduction of "First Steps for Little Feet" so early as the third year, unless in the case of an uncommonly bright class.

These few criticisms are all that we have to make on a most admirably prepared course of study and a valuable addition to our professional publications. Discussions and comparisons of one another's work cannot fail to be beneficial. It is to be hoped that other schools will recognize the merits and usefulness of Mr. Patterson's work, and will emulate it by striving to improve on it.

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LYON, EDMUND. The Lyon Phonetic Manual (Circular of Information, No. 2, 1891, of the American Association to Promote the Teaching of Speech to the Deaf). Rochester, N. Y. : Printed at the Deaf-Mute Institution. 1891. 8vo, pp. 73.

The Lyon Phonetic Manual is a work which is worthy of careful examination by teachers of articulation, and its mastery by them ought to be helpful in more ways than one. The Manual indicates to the initiated, at a glance, the consonants, vowels, and "glides" of speech, as such, with important hints as to the manner of their formation and their analytical relations. In short, it symbolizes the results of a scientific analysis of the mechanism of speech. This result is accomplished by definite and related muscular adjustments of one hand only, and it need hardly be said that this is an ingenious and remarkable achievement.

By phoneticians and teachers desiring a convenient means for self-examination and review of the mechanism of the sounds of speech, Mr. Lyon's Manual may be used advantageously. Teachers of deaf children not afraid to use pictures and diagrams in their work will doubtless be inclined to test the utility of the phonetic manual with their pupils as an aid in learning to speak and to read speech. If used merely as an arbitrary phonetic alphabet by deaf children and their teachers in the early stages of instruction, along with speech, it is obvious that the manual symbols may supplement the elements obscure to sight and difficult of utterance, and thus contribute to the legibility of speech to deaf pupils as well as to the intelligibility of imperfect speech to those who hear.

A very imperfect phonetic manual alphabet was used extensively for this purpose, as preparatory to speech and speech-reading, a generation ago in one of the French schools by the Brothers of Saint Gabriel, and the resulting progress in speech, speech-reading, and language was reported as extremely satisfactory.

Certain pupils of the Western New York Institution have learned the Lyon Manual, and of their own accord use it instead of the ordinary finger-alphabet in conversation with one another and with others familiar with it. It is understood that the results of the experimental use of the phonetic alphabet at Rochester have been gratifying, but how thorough or extensive a test has been made is not known to the writer.

The typography and all that goes to the mechanical make up of Mr. Lyon's Manual can not be too highly commended; and, aside from the technical and scientific character of the book, it should be prized for the illustrations, which are works of art in themselves.

J. C. G.

NISSEN, HARTVIG. *A B C of the Swedish System of Gymnastics.* A practical hand-book for school teachers and the home. With 77 illustrations. Philadelphia and London: F. A. Davis. 1891. 12mo, pp. 107.

This little book is well named, as it contains not only the A B C of Swedish educational gymnastics, but presents the exercises in such a form that the volume constitutes a practical hand-book, invaluable as a guide to teachers. The common error of using technical terms unaccompanied by explanations and of abbreviating words and sentences in works of this class is carefully avoided. In fact, it is difficult to imagine a clearer or more simple style, while the seventy-seven engravings illustrating the exercises leave nothing to be desired.

The first chapter is composed of a series of questions and answers. In this we find what gymnastics are; how many kinds; the object of educational gymnastics; how the object is obtained; the best system for use in school-rooms, and remarks on gymnastic apparatus.

The second chapter is devoted to Swedish educational gymnastics. Here, also, by means of questions and answers, one is made to understand the subject. In the arrangement of Swedish gymnastics, order and marching exercises come first. These are followed by real gymnastic exercises, which are di-

vided into introductory, or the simplest movements, and principal, or the stronger and more difficult movements. Lastly, we have gymnastic games, such as running plays, wrestling, dancing, etc.

The chief points to be considered in the Swedish system of gymnastics are the correct fundamental and starting positions, because all the movements are based on the shape of the human body in correct position, with all the different parts in harmony with each other. The fundamental position requires the heels to be together, feet at right angles, knees straight, hips even and well drawn back, chest expanded, shoulders even in the same plane and drawn back without stiffness, arms hanging down to the sides in a straight line from the shoulder to the tip of the fingers, with the palms in toward the thigh, head raised even on the shoulders and chin drawn in, eyes looking straight forward, and the weight of the body supported on the balls of the feet. The starting positions, fourteen in number, are derived from the fundamental position, and all the exercises of the Swedish system are performed in these positions or in those which lead out from or are derived from them, either singly or in combination.

The primary movements, such as bending, circling, jumping, raising, rotating, stretching, and twisting, are fully explained and illustrated. The positions and the movements have both the reason for them and their effects given, forming a most interesting and instructive account.

A few pages are devoted to instruction. Here will be found suggestions as to how instructions should be given, how faults can be corrected, how to make exercises interesting, how often an exercise ought to be repeated, the signs of overtaxing the muscles, and the proper way to breathe during exercise. The remainder of the chapter is devoted to the day's order and to progression. It is in these that the Swedish system has its greatest strength. It is claimed that exercises must follow each other in a certain order and be progressive from day to day to secure a harmonious development, to have a healthy and strengthening effect on the nervous system, and to give rest to the brain.

The exercises given in this book, being intended for use in the school-room, are arranged with special reference to the wants of pupils. Before exercise is taken the pupils are supposed to have been sitting still for a length of time, with their powers

concentrated on mental work. In most cases the chest has been more or less contracted, with the head and shoulders stooping forward; the circulation of the blood has become sluggish; the respiration is lessened; the mind is tired and the muscles relaxed. The object of Swedish educational gymnastics is to counteract these evils by relieving the brain and straightening the compressed parts, by equalizing and quickening the circulation, by producing a healthy respiration, and by adding strength and tone to the muscles and the body generally. The order of exercises for a day consists of from eleven to fourteen groups of movements, so arranged that each day's order will make a harmonious, all-sided exercise, if the groups are followed in the order named. Thus one group of exercises tends to draw the blood from the head, another expands the chest, a third quickens respiration and causes the heart to beat more rapidly, while the last group tends to decrease the rapid action of the heart and otherwise prepare the body for rest. But it depends on the teacher whether the exercises shall be attractive and beneficial to the pupils.

The third and last chapter is given up to tables of exercises for pupils from the third class of the primary schools up to the first class in the grammar schools. These exercises are arranged in series of daily lessons or orders, and are progressive either in their relation to each other or by being executed a greater number of times and with increasing vigor. All the movements are to be done without apparatus, save the occasional use of the desks, and are expected to be performed by the pupils in their ordinary clothes.

While these exercises as a whole are well arranged and comprehensive, there are a few which could well be omitted. In several exercises the use of the desk as shown would be apt to break or disfigure it; furthermore, certain of the bending and stretching movements would ruin the pupil's clothing. Still, the system explained in this book is without doubt the best that has yet been devised for use in the school-room. But we fully agree with the author in what he says in the preface regarding the necessity for a combination system in gymnasiums, colleges, and universities. Such eminent physical educators as Sargent and Hartwell agree that exercise without apparatus fails to develop the muscles properly, and renders the correction of certain deformities and defects extremely difficult, if not impossible. Furthermore, no matter how free-movements

are arranged, their simplicity causes them to become monotonous, particularly to the older pupils. For young children, Swedish educational gymnastics may answer all purposes: but this training should be supplemented by graded exercises with apparatus, such as pulley-weight machines, to produce a full development, to remedy serious defects, and to furnish variety. Exercises of skill on standard apparatus like the horizontal-bar, horse and parallel-bars, should come next in order, that the brain, nerves, and muscles may be trained to act in perfect co-ordination. In performing more or less difficult feats the pupil's courage and will are developed. Although Swedish gymnastics are the most simple of all, yet the author lays stress on the necessity of having trained teachers to lead or supervise the exercises. The success of school gymnastics in Sweden is really due to the fact that no teacher is given a certificate who is not proficient in Swedish gymnastics.

ALBERT F. ADAMS, B. A.,

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National College. Washington, D. C.

SEXTON, SAMUEL, M. D., and DUANE, ALEXANDER, M. D.
Deafness and Discharge from the Ear. The Modern Treatment for the Radical Cure of Deafness, Otorrhœa, Noises in the Head, Vertigo, and Distress in the Ear. New York: J. H. Vail & Co. 1891. 12mo, pp. 89. Price 50 cents.

We have already mentioned in the *Annals* (xxxiii, 163, and xxxiv, 39) Dr. Sexton's operation of the excision of the drum-head and ossicles in certain grievous diseases of the ear—an operation usually resulting in the entire cure of the disease, and often in the more or less complete restoration of the hearing. The little book before us is written in answer to numerous requests for further information concerning this treatment. We earnestly commend it to the heads of all our schools for the deaf and the attendant physicians. Among our pupils there are many cases of catarrhal and suppurative diseases of the middle ear which can be relieved by this treatment, and the sooner the operation is performed the better will be the results produced.

REPORTS OF SCHOOLS, 1891: Glasgow (Scotland), Groningen (Netherlands), Horace Mann, Wenersborg (Sweden).

REPORT of the College of Teachers of the Deaf and Dumb, London, England, 1891.

ELEVENTH ANNUAL REPORT of the Pennsylvania Diocesan Commission on Church Work Among the Deaf, 1891.

TABULAR STATEMENT OF AMERICAN SCHOOLS FOR THE DEAF, 1891.

A.—PUBLIC SCHOOLS IN THE UNITED STATES.

Name.	Location.	Date of opening.	Chief Executive Officer.
1 American Asylum for the Education and Instruction of the Deaf and Dumb.....	Hartford, Conn.....	1817	Job Williams, L. H. D., Principal.
2 New York Institution for the Instruction of the Deaf and Dumb.....	Washington Heights, New York, N. Y.....	1818	{ Isaac Lewis Peet, LL. D., Principal; Chauncey N. Brainerd, Superintendent.
3 Pennsylvania Institution for the Deaf and Dumb.....	Philadelphia, (a) Pa.....	1820	A. L. E. Crouter, M. A., Principal.
4 Kentucky Institute for Deaf-Mutes.....	Danville, Ky.....	1823	W. K. Argo, M. A., Superintendent.
5 Ohio Institution for the Education of the Deaf and Dumb.....	Columbus, Ohio.....	1829	James W. Knott, M. S., do.
6 Virginia Institution for the Education of the Deaf and Dumb and of the Blind.....	Staunton, Va.....	1839	Thomas S. Doyle, Principal.
7 Indiana Institution for the Education of the Deaf and Dumb.....	Indianapolis, Ind.....	1844	Richard O. Johnson, Superintendent.
8 Tennessee Deaf and Dumb School.....	Knoxville, Tenn.....	1845	Thomas L. Moses, Principal.
9 North Carolina Institution for the Deaf and Dumb and the Blind.....	Raleigh, N. C.....	1845	W. J. Young, M. A., do.
10 Illinois Institution for the Education of the Deaf and Dumb.....	Jacksonville, Ill.....	1846	Philip G. Gillett, M. A., LL. D., Supt.
11 Georgia Institution for the Education of the Deaf and Dumb.....	Cave Spring, Ga.....	1846	W. O. Connor, Principal.
12 South Carolina Inst'n for the Education of the Deaf and Dumb and the Blind.....	Cedar Spring, S. C.....	1849	Newton F. Walker, Superintendent.
13 Missouri School for the Deaf and Dumb.....	Fulton, Mo.....	1851	Jas. N. Tate, M. A., do.
14 Louisiana School for the Deaf.....	Baton Rouge, La.....	1852	John Jastrenski, M. D., do.
15 Wisconsin School for the Deaf.....	Delavan, Wis.....	1852	John W. Swiler, M. A., do.
16 Michigan School for the Deaf.....	Flint, Mich.....	1854	M. T. Gass, M. A., do.
17 Mississippi Institution for the Education of the Deaf and Dumb.....	Jackson, Miss.....	1854	J. R. Dobyns, M. A., do.
18 Iowa Institution for the Education of the Deaf and Dumb.....	Council Bluffs, Iowa.....	1856	{ Henry W. Rother, Superintendent; G. L. Wyckoff, Principal.
19 Texas Deaf and Dumb Asylum.....	Austin, Texas.....	1857	W. A. Kendall, Superintendent.
20 Columbia Institution for the Deaf and Dumb.....	Kendall Green, near Washington, D. C.....	1857	E. M. Gallaudet, Ph. D., LL. D., Pres't.
A. Kendall School for the Deaf.....	do ..	1857	James Denison, M. A., Principal.
B. National Deaf-Mute College.....	do.....	1864	E. M. Gallaudet, Ph. D., LL. D., Pres't.
21 Alabama Institute for the Deaf.....	Talladega, Ala.....	1860	Joseph H. Johnson, M. D., Principal.
22 California Institution for the Education of the Deaf and Dumb and the Blind.....	Berkeley, Cal.....	1860	Warring Wilkinson, L. H. D., do.
23 Kansas Institution for the Education of the Deaf and Dumb.....	Olathe, Kansas.....	1861	S. T. Walker, M. A., Superintendent.
24 Le Couteux St. Mary's Inst'n for the Improved Instruction of Deaf-Mutes.....	Buffalo, (b) N. Y.....	1861	Sister Mary Anne Burke, Principal.
25 Minnesota School for the Deaf.....	Faribault, Minn.....	1863	Jonathan L. Noyes, L. H. D., Sup't.
26 Institution for the Improved Instruction of Deaf-Mutes.....	New York, (c) N. Y.....	1867	D. Greenberger, Principal.
27 Clarke Institution for Deaf-Mutes.....	Northampton, Mass.....	1867	Miss Caroline A. Yale, Principal.

28	Arkansas Deaf-Mute Institute.....	Little Rock, Ark.....	1867	Francis D. Clarke, M. A., Principal.
29	Maryland School for the Deaf.....	Frederick, Md.....	1868	Chas. W. Ely, M. A., Principal.
30	Nebraska Institute for the Deaf and Dumb.....	Omaha, Neb.....	1869	John A. Gillespie, M. A., Principal.
31	Horace Mann School for the Deaf.....	Boston, (d) Mass.....	1869	Miss Sarah Fuller, do.
32	St. Joseph's Institute for the Improved Instruction of Deaf-Mutes	Fordham, N. Y., (e)	1869	Madam Ernestine Nardin, President.
33	West Virginia School for the Deaf and the Blind	Romney, W. Va.....	1870	O. H. Hill, Principal.
34	Oregon School for Deaf-Mutes.....	Salem, Oregon.....	1870	Rev. P. S. Knight, Ph. D., Sup't.
35	Maryland School for Colored Blind and Deaf.....	Baltimore, (f) Md	1872	F. D. Morrison, M. A., do.
36	Colorado School for the Deaf and the Blind.....	Colorado Springs, Colo.....	1874	John E. Ray, M. A., do.
37	Chicago Deaf-Mute Day-Schools.....	Chicago, Ill., (g).....	1875	P. A. Emery, M. A., Principal.
38	Central New York Institution for Deaf-Mutes.....	Rome, N. Y.....	1875	Edward B. Nelson, B. A., Principal.
39	Cincinnati Public School for the Deaf.....	Cincinnati, (h) Ohio.....	1875	Miss Caroline Fesenbeck, Principal.
40	Western Pennsylvania Institution for the Instruction of the Deaf and Dumb.....	Edgewoodville, Pa.....	1876	William N. Burt, M. A., Principal.
41	Western New York Institution for Deaf-Mutes.....	Rochester, N. Y.....	1876	Z. F. Westervelt, Sup't and Principal.
42	Portland School for the Deaf.....	Portland, Me. (m).....	1876	Miss Ellen L. Barton, Principal.
43	Rhode Island School for the Deaf.....	Providence, (i) R. I.....	1877	Miss Laura DeL. Richards, Principal.
44	St. Louis Day-School for the Deaf.....	St. Louis, (k) Mo.....	1878	Jas. H. Cloud, M. A., do.
45	New England Industrial School for Deaf-Mutes	Beverly, Mass.....	1879	Miss Nellie H. Swett, do.
46	Dakota School for Deaf-Mutes.....	Sioux Falls, South Dak.....	1880	James Simpson, Superintendent.
47	Milwaukee Day-School for the Deaf.....	Milwaukee, (l) Wis.....	1883	Paul Binner, Principal.
48	Pennsylvania Oral School for the Deaf.....	Scranton, Pa.....	1883	Miss Mary B. C. Brown, Principal.
49	New Jersey School for the Deaf	Trenton, N. J.....	1883	Weston Jenkins, M. A., Superintendent.
50	Utah School for the Deaf.....	Salt Lake City, Utah.....	1884	Frank W. Metcalf, Principal.
51	Northern New York Institution for Deaf-Mutes.....	Malone, N. Y.....	1884	Henry C. Rider, Superintendent.
52	The Florida Blind and Deaf-Mute Institute.....	St. Augustine, Fla.....	1885	Wm. A. Caldwell, M. A., Principal.
53	New Mexico School for the Deaf and Dumb	Santa Fé, N. M.....	1885	Lars M. Larson, B. A., Superintendent.
54	Washington School for Defective Youth.....	Vancouver, Wash.....	1886	James Watson, Director.
55	Evansville Public School for the Deaf.....	Evansville, Ind.....	1886	Chas. Kerney, B. A., Principal.
56	Cincinnati Oral School for the Deaf.....	Cincinnati, Ohio, (n).....	1886	Miss V. A. Osborne, Principal.
57	La Crosse Oral School for the Deaf.....	La Crosse, Wis.....	1886	Miss Viola Taylor, Principal.
58	Deaf, Dumb, and Blind Institution for Colored Youths.....	Austin, Tex.....	1887	W. H. Holland, Superintendent.
59	School for the Deaf of North Dakota.....	Devil's Lake, No. Dak.....	1890	A. R. Spear, Principal.
60	Toledo Deaf-Mute School.....	Toledo, Ohio (o)	1890	Alfred F. Wood, Principal.
61	Wausau Day-School for the Deaf.....	Wausau, Wis.....	1890	Miss Edith E. Brown, Principal.
62	Public Schools, including the National College.			
13	Denominational and Private Schools. (p)			
77	Schools in the United States.			

(a) Broad and Pine, and (Oral Branch) Eleventh and Clinton streets.

(d) No. 178 Newbury street.

(e) This Institution has three branches; one situated at Fordham, another at Brooklyn (113 Buffalo ave.), and another at Throgg's Neck, Westchester co., N. Y.

(f) No. 649 W. Saratoga street.

(h) Ninth street, bet. Walnut and Main.

(i) Corner Seventh and Prairie streets.

(b) No. 125 Edward street.

(c) Lexington Ave., bet. 67th and 68th streets.

(g) There are five schools in different parts of the city. Mr. Emery's address is 43 So. May street.

(n) Cor. Ninth and Race streets.

(o) Jefferson and Eleventh streets.

(p) See page 64.

TABULAR STATEMENT OF AMERICAN SCHOOLS FOR THE DEAF, 1891—Continued.
PUBLIC SCHOOLS IN THE UNITED STATES—Continued.

NO. OF PUPILS.			NO. OF INSTRUCT-ORS.											
Name.	Method of Instruction.	School-hours.	Industries Taught.	WITHIN THE YEAR.			Total have re-ceived instr'n	NO. OF INSTRUCT-ORS.						
				Total.	Male.	Female.		No. taught articu-lation.	Present Dec. 1, 1891.	Whole No.	Male.	Female.	Deaf.	Articu-lation.
1 American Asylum.....	Combined, A....	9 to 12 and 2 to 4.....	Cab., Sh.....	171	102	69	121	139	2,513	16	7	9	3	4
2 New York Institution.....	Combined, E.F.	8 to 12 and 1 to 5 (b).....	Art. Bak., Cab., Car., Ch., Dr., Ga., Gl., Pa., Pr., Sh., Ta., Wc. Car., Ck., Dr., Gl., Kn., Pr., Sh., Ta.	342	231	111	335	292	3,291	16	7	9	6	8
3 Pennsylvania.....do.....	Combined, B.C.	8 to 1 and 2 to 4½.....	Car., Ga., Pr., Se., Sh.....	490	279	211	130	435	2,449	38	9	29	4	14
4 Kentucky Institute.....	Combined, A.B.	7¼ to 12½.....	Bo., Car., Pr., Sh., Ta.....	237	143	94	81	195	1,090	10	8	8	6	2
5 Ohio Institution.....	Combined, A...	8 to 10½, 10½ to 12½, 2 to 4½. (c)	Car., Pr., Sh., Ta.....	451	233	218	125	358	2,472	26	11	15	9	2
6 Virginia.....do (a).....	Combined, A...	8½ to 1½.....	Bak., Cab., Fa., Fl., Pr., Sh., Pr., Sh.....	113	58	55	25	88	647	11	8	3	5	1
7 Indiana.....do.....	Combined, A.F.	8 to 1 and 2 to 4½.....	Se., Sh.....	342	180	162	68	291	1,835	21	12	9	10	1
8 Tennessee School.....	Combined, B...	8½ to 11½ and 1 to 3½.....	Eak., Cab., Car., Cl., Dr., Ga., Gl., Pa., Pr., Sh., Wt. Gar., Sh.....	188	107	81	110	161	.....	9	5	4	3	1
9 North Carolina Institution.....	Combined, B...	8 to 2.....	Pa., Pr., Se., Sh.....	149	73	76	12	136	.....	9	7	2	4	1
10 Illinois.....do.....	Comb., A. B. F.	8 to 11 and 12, 1 to 3 and 4½ and 1½ to 2½.	Car., Pr., Se.....	595	343	252	275	570	2,247	35	13	22	7	8
11 Georgia.....do.....	Combined, A...	8 to 1.....	Bak., Cab., Dr., Pr., Sh.....	103	61	42	.....	88	457	8	5	3	3	1
12 South Carolina.....do.....	Combined, B...	8 to 1.....	Cab., Car., Dr., Pr., Sh., Ta.	91	51	40	26	73	277	7	3	4	3	2
13 Missouri School.....	Combined, A.B.	7½ to 10½, 10½ to 12½, and 2 to 4½ (b).....	Car., Pr., Se.....	336	208	128	80	267	1,191	18	8	10	6	2
14 Louisiana.....do.....	Combined, A...	8½ to 10½, 10½ to 12½, and 1½ to 2½.	Bak., Cab., Dr., Pr., Sh.....	127	65	62	29	60	.....	5	2	3	3	1
15 Wisconsin School.....	Combined, A.B.	8 to 12 and 1 to 4½.....	Cab., Car., Dr., Pr., Sh., Ta.	210	126	74	45	180	891	16	7	9	4	3
16 Michigan.....do.....	Combined, A.B.	8½ to 11½ and 1 to 4 (b).....	Car., Pr.....	345	183	162	65	294	1,126	19	7	12	4	2
17 Mississippi Institution.....	Combined, A.F.	8½ to 1.....	Bak., Br., Car., Dr., Pr., Sh., Ta.	93	50	43	15	81	500	7	5	2	4	1
18 Iowa.....do (a).....	Combined, G...	8 to 11½ and 1 to 3.....	Art., Bo., Car., Pr., Sh.....	309	199	110	25	270	.....	18	8	10	6	2
19 Texas Asylum.....	Combined, A...	8 to 12½ and 1½ to 5½.....	Cab., Pr.....	220	135	94	50	196	496	13	7	6	3	1
20 Columbia Institution.....	Comb., A. E. F.	8½ to 12½ and 2 to 3.....	None.....	67	43	24	34	41	354	7	4	3	3	2
A. Kendall School.....	Combined, A.F.	8 to 12½ and 1½ to 3½.....	Bl., Cab., Pr., Sh.....	66	53	13	63	63	370	19	16	3	2	10
B. National College.....	Combined, B...	8 to 1.....	Pr., Wood-working.....	103	50	53	22	82	.....	6	3	3	3	2
21 Alabama Institute.....	Combined, A.B.	8 to 1.....	Be., Cab., Car., Ga., Gl., Pr., Se., Sh., Wc., Wt.	158	95	63	68	145	390	11	8	3	3	2
22 California Institution (a).....	Combined, A.F.	7½ to 10½, 10½ to 12½ and 2 to 4½ (d)	Ch., Dr., Pr., Sh., Ta.....	270	146	124	54	234	660	18	7	11	4	1
23 Kansas.....do.....	Combined, E.F.	8 to 12 and 1 to 5.....	Cab., Car., Dr., Pr., Sh., Ta.	141	74	67	136	129	508	12	0	12	0	11
24 Le Conte x St. Mary's Inst.....	Comb., A. B. F.	8½ to 11½ and 1 to 3½.....	Use of tools.....	242	136	106	100	207	582	12	7	5	4	2
25 Minnesota School.....	Oral.....	9 to 12 and 1½ to 3½.....		223	120	103	223	194	547	21	9	12	0	21
26 N. Y. Institut'n for Imp'v'd Ins'n														

TABULAR STATEMENT OF AMERICAN SCHOOLS FOR THE DEAF, 1891—Continued.
PUBLIC SCHOOLS IN THE UNITED STATES—Continued.

Name.	Vacation.	How Supported.	Value of buildings and grounds.	Expenditure last fiscal year. For support. For buildings and grounds.	No. vols. in library.
1 American Asylum.....	Last Wed. in June to second Wed. in Sept.	Endowment and N. E. States.....	\$250,000	.....	2,000
2 New York Institution.....	Third Wed. in June to first Wed. in Sept.	State, counties, and pay pupils.....	458,000	\$5,743	4,700
3 Pennsylvania do.....	Last Wed. in June to Sept. 15.....	State endowment, and pay pupils.....	850,000	671	6,400
4 Kentucky do.....	June 18 to Sept. 9.....	State.....	176,500	38,528	1,650
5 Ohio.....	Third Wed. in June to second Wed. in Sept.	do.....	750,000	85,591	3,095
6 Virginia..... do* (a).....	Second Wed. in June to first Wed. in Sept.	do.....	250,000	.....	250
7 Indiana.....	Second Wed. in June to fourth Wed. in Sept.	do.....	521,100	58,779	13,605
8 Tennessee School.....	Second Wed. in June to second Fri. in Sept.	do.....	150,000	27,325	10,000
9 North Carolina Institution*	Second Wed. in June to second Wed. in Sept.	do.....	75,000	40,000	600
10 Illinois..... do.....	Second Wed. in June to third Wed. in Sept.	do.....	400,000	92,000	7,000
11 Georgia..... do.....	Third Wed. in June to second Wed. in Sept.	do.....	70,000	18,293	15,000
12 South Carolina..... do*.....	Last Wed. in June to first Wed. in Oct.	State and pay pupils.....	55,000	14,681	800
13 Missouri..... do.....	Second Wed. in June to second Wed. in Sept.	State.....	260,000	50,000	1,150
14 Louisiana..... do.....	June 1 to Oct. 1.....	do.....	200,000	14,000	300
15 Wisconsin School.....	Second Wed. in June to first Wed. in Sept.	do.....	110,000	36,383	1,378
16 Michigan..... do.....	Thurs. after June 7 to third Wed. in Sept.	do.....	419,875	56,800	130
17 Mississippi..... do.....	Third Wed. in June to first Mon. in Oct.	do.....	125,000	14,108	500
18 Iowa..... do (a).....	Second Wed. in June to second Wed. in Sept.	do.....	400,000	37,900	1,900
19 Texas Asylum.....	1st Wed. in June to 1st Wed. in Sept.	do.....	190,000	34,457	750
20 Columbia Institution.....	Wed. before last Wed. in June to Thurs. before last Thurs. in Sept.	United States and pay pupils.....	700,000	60,971	3,700
21 Alabama..... do.....	June 10 to Sept. 10.....	State.....	75,000	17,835	600
22 California..... do* (a).....	Second Wed. in June to 4th Wed. in August.	do.....	442,000	48,166	1,400
23 Kansas..... do.....	Second Wed. in June to second Wed. in Sept.	do.....	187,000	38,120	1,426
24 Le Couteux St. Mary's Inst.	Wed. before last week in June to first Mon. in Sept.	State, counties, and pay pupils.....	153,000	28,214	665
25 Minnesota School.....	First Wed. in June to second Wed. in Sept.	State.....	250,000	39,533	1,326
26 N. Y. Inst. for Imp'v'd Ins'n.....	Third Wed. in June to first Wed. in Sept.	State, counties, and pay pupils.....	360,000	52,103	910
27 Clarke Institution.....	Forty weeks after third Wed. in Sept. to third Wed. in Sept.	Endowment, N. E. States, and pay pupils.....	87,000	31,975	1,720

29	Arkansas Institute.	Second Wed. in June to first Wed. in Oct.	State	100,000	12,495	8,150	794
30	Maryland School	Third Wed. in June to second Wed. in Sept.	do.	250,000	24,619	1,500	2,350
31	Nebraska Institute.	Middle of June to middle of Sept.	do.	117,000	31,250	3,000	1,400
32	Horace Mann School.	Last Tues. in June to first Wed. in Sept.	State and city.	97,800	12,100	490	688
33	St. Joseph's Institute.	Last Fri. in June to second Mon. in Sept.	State, counties, and pay pupils	266,623	59,014	...	700
34	West Virginia Institute.	Forty weeks after second Wed. in Sept. to second Wed. in Sept.	State.	85,000	25,874	4,144	816
35	Oregon School	May 1 to first Wed. in Sept.	do.	10,000	6,000	1,000	...
36	Md. School for Colored.	June 25 to Sept. 10	do.	35,000	8,915	...	150
37	Colorado Institute.	First Wed. in June to first Wed. in Sept.	do.	162,100	33,917	5,024	500
38	Chicago Day-Schools	June 28 to first Mon. in Sept.	City	125,000	40,991	2,376	500
39	Central N. Y. Institution	Second week in June to third Wed. in Sept.	State and counties.	...	...	...	...
40	Cincinnati Public School.	June 23 to second Mon. in Sept.	City	...	...	...	...
41	Western Penn'a Institution.	Last Wed. in June to first Wed. in Sept.	State and voluntary contributions	214,967	39,011	2,593	991
42	Western New York Institution	Forty-two wks after first Mon. in Sept. to first Mon. in Sept.	State, counties, and pay pupils.	126,000	42,510	...	1,500
43	Portland Day-School	Last Sat. before July 4 to second Mon. in Sept.	State and city.	...	...	...	...
44	Rhode Island School.	Last Fri. in June to first Mon. in Sept.	State	...	4,910	...	96
45	Mt. Louis Day-School	Second Friday in June to first Mon. in Sept.	City	12,000	...	...	...
46	N. E. Industrial School.	Third Wed. in June to second Tues. in Sept.	Voluntary contributions and State.	...	...	...	...
47	Dakota School	Second Wed. in June to second Wed. in Sept.	State	12,000	...	...	...
48	Penn'a. Oral School (a).	Last Fri. in June to first Mon. in Sept.	State and city and county	12,000	5,500	...	...
49	New Jersey School	June 20 to Sept. 1	State	65,000	8,760	13,783	...
50	Utah School	June 16 to Sept. 10	do	100,000	...	...	615
51	Northern N. Y. Institution.	Second Wed. in June to second Mon. in Sept.	Territory and pay pupils	100,000	6,917	1,767	25
52	Florida Institute.	Second Wed. in June to second Wed. in Sept.	State and counties.	70,000	26,331	...	135
53	New Mexico School	Second Mon. in June to Oct. 1	State	16,000	10,000	...	100
54	Washington State School	Third week in June to second week in Sept.	Territory and pay pupils	...	1,923	...	75
55	Evansville School.	Thurs. after last Wed. in May to last Wed. in Aug.	State.	...	1,800	...	...
56	Cincinnati Oral School	First Thurs. in June to first Mon. in Sept.	City	...	1,860	...	...
57	La Crosse Oral School	June 20 to Sept. 8.	State and city	...	...	...	...
58	Texas Institution for Colored.	First Mon. in Sept.	do	...	...	...	...
59	North Dakota School.	June 15 to Sept. 15	State	37,000	16,500	6,000	35
60	Toledo School	Second Wed. in June to second Wed. in Sept.	State	...	...	...	...
61	Wausau Day-School	June 24 to first Mon. in Sept.	City	...	...	...	...
62	Public Schools.	June 18 to Sept. 8	State and city.	...	...	...	...

* Contains a department for the blind also, the expenses of which are included in the statement of expenditures.
(a) For the year 1890.

62 Public Schools.
15 Denominational and Private
Schools. (See next page.)
77 Schools in the United States.

Name.	Vacation.	How Supported.
1 Whipple's Home School.....	June 5th to Sept. 3d.....	Tuition fees and State and towns.....
2 Germ. Lutheran Institute.....	July 15th to September 1st.....	Tuition fees and Lutheran Congregations.....
3 St. John's Cath. Institute.....	End of June to first week in Sept.....	Voluntary contributions and tuition fees.....
4 Mr. Knapp's Institute.....	.....	.....
5 McCowen Oral School.....	Middle of June to middle of Sept.....	Tuition fees and voluntary contributions.....
6 Ephpheta School.....	Last Friday in June to first Monday in Sept.....	Ephpheta Society.....
7 Maria Consilia Institute.....	Last week of June to first week of Sept.....	Tuition fees and voluntary contributions.....
8 Miss Keeler's Class.....	Third Wednesday in June to second week in Sept.....	Tuition fees.....
9 St. Mary's Institute.....	June 25th to first Monday in September.....	Voluntary contributions.....
10 Sarah Fuller Home.....	No regular vacations.....	Private subscription.....
11 Eastern Iowa School.....	June 12th to Sept. 15th.....	Contributions, fairs, and exhibitions.....
12 Albany Home School.....	Last of June to second week in September.....	Tuition fees and county appropriations.....
13 Notre Dame School.....	15th of June to first week in September.....	Voluntary contributions.....
14 Miss Kugler's School.....	Second Friday in June to first Monday in September.....	Tuition fees.....
15 Chinchuba Institution.....	June 1 to September 1.....	Voluntary contributions and tuition fees.....
15 Denom. and Private Schools.....	.....	.....

* Including the pupils who have left during the year. † Including the principal. (a) Nos. 201-205
Holliday street. (b) 6550 Yale street. (c) 409 S. May street. (d) 1849 Cass Avenue. (e) 27 East Forty-sixth street. (f) 536 Mississippi street.
(h) 40 Canal street. (i) 42 Lancaster street. (k) For the year 1890. (l) See pages 68-73. (m) East Sixth street. (n) 2866 Wisconsin Avenue.
Car. = Carpentry. Cl. = Clay modelling. Dr. = Dressmaking. Ho. = Housework. Pa. = Painting. Pr. = Printing. Se. = Sewing. Sh. = Shoemaking.
Ta. = Tailoring. Wc. = Wood-carving.

made for the Deaf in Canada, 1891.

Name	Location	Year	Principal
1 Catholic Male Deaf and Dumb Institution for the Province of Quebec	Montreal, P. Q.	1844	Rev. J. B. Abbot, P. Q.
2 Catholic Female Deaf-Mute Institution	Montreal, P. Q. (n)	1861	Miner (Baron of Breckinridge), Superiorintendent
3 Halifax Institution for the Deaf and Dumb	Halifax, N. S.	1867	James Farnon, Principal
4 Ontario Institution for the Deaf and Dumb	Bellefille, Ontario	1870	R. Matheson, Superintendent
5 Mackay Institution for Protestant Deaf-Mutes and the Blind	Montreal, P. Q. (b)	1870	Mrs. H. K. Ashcroft, Superintendent
6 Fredericton Institution for the Education of the Deaf and Dumb	Fredericton, N. B.	1882	Albert F. Woodbridge, Principal
7 Manitoba Institution for the Education of the Deaf	Winnipeg, Manitoba	1888	D. W. McDermid, Principal

7 Schools in Canada.

Name.	Method of In- struction (c).	School-hours.	Industries Taught.**	NO. OF PUPILS.				NO. OF INSTRUCT- ORS.†						
				WITHIN THE YEAR.*				Total have re- ceived in- struction.	Whole No.	Male.	Female.	Deaf.		
				Total.	Male.	Female.	No. taught articula- tion.						Present Dec. 1, 1891.	
1 Catholic Inst'n, (Male).....	Combined, B.	8 to 9, 10 ¹ , to 12, 1½ to 4½.....	Ba., Bl., Bo., Cab., Car., Fa..... Ga., Pa., Pr., Sh., Ta., Wt.....	113	113	.....	60	105	560	30	30	0	2	7
2 Catholic Inst'n, (Female).....	do.....C.	6 hours.....	Art., Em., Kn., Sc., Weaving.....	196	.....	196	72	160	.....	38	0	38	2	15
3 Halifax Institution.....	do.....A.	9 to 11, 11½ to 12½ and 2 to 4	Ga.....	72	44	28	27	61	338	6	3	3	2	1
4 Ontario Institution.....	do.....A.	9 to 12 and 1½ to 3.....	Car., Dr., Sh., Ta.....	296	166	130	43	249	908	15	7	8	6	1
5 Mackay Institution.....	do.....F.	9 to 12 and 1½ to 3½.....	Cab., Car., Dr., Pr., Wc.....	50	31	19	20	49	140	5	1	4	0	3
6 Fredericton Institution.....	do.....A.	9 to 12 and 2 to 4.....	None.....	27	13	14	2	25	47	4	4	0	1	0
7 Manitoba Institution.....	do.....F.	9 to 11½ and 1½ to 3½.....	Sc., Wc.....	39	23	16	5	34	43	4	2	2	2	1
7 Schools in Canada.....				793	390	403	229	693	2,636	102	47	55	15	34

Name.	Vacation.	How Supported.	Value of buildings and grounds.	EXPENDITURE LAST FISCAL YEAR.		No. volumes in library.
				For support.	For buildings and grounds.	
1 Catholic Inst'n, (Male).....	Third Wed. in June to first Wed. in Sept.....	Province, pupils, and vol. contributions.....	.....	.....	.....	1,000
2 Catholic Inst'n, (Female).....	July 1st to Sept. 1st.....	Province and voluntary contributions.....	.....	.....	.....	1,300
3 Halifax Institution.....	First Wed. in July to first Wed. in Sept.....	Province and voluntary contributions.....	\$20,000	\$9,069	\$1,353	.....
4 Ontario Institution.....	Third Wed. in June to second Wed. in Sept.....	Province.....	220,000	43,927	10,000	1,750
5 Mackay Institution.....	Third Wed. in June to second Wed. in Sept.....	Province, pupils, and vol. contributions.....	.....	.....	.....	525
6 Fredericton Institution.....	July 1 to Sept. 1.....	Province and voluntary contributions.....	20,000	4,482	1,200	600
7 Manitoba Institution.....	Second Wed. in June to second Wed. in Sept.....	Province.....	36,000	7,615	3,500	300
7 Schools in Canada.						

* Including those who have left school during the year. † Including all who teach by speech and speech reading. • Ba. = Baking. Bl. = Blacksmithing. Bo. = Book-binding. Cab. = Cabinet-making. Car. = Carpentry. Dr. = Dress-making. Em. = Embroidering. Fa. = Farming. Ga. = Gardening. Kn. = Knitting. Pa. = Painting. Pr. = Printing. Se. = Sewing. Sh. = Shoemaking. Ta. = Tailoring. Wc. = Wood-carving. Wt. = Wood-turning. (a) No. 401 St. Denis street. (b) Notre Dame de Grace. (c) See pages 68-73.

METHODS OF INSTRUCTION IN AMERICAN SCHOOLS.

THE "Methods of Instruction" named in the foregoing Tabular Statement of American Schools (pages 58-67) may be defined as follows :

I. *The Manual Method.*—The sign-language, the manual alphabet, and writing are the chief means used in the instruction of the pupils, and the principal objects aimed at are mental development and facility in the comprehension and use of written language. The degree of relative importance given to these three means varies in different schools ; but it is a difference only in degree, and the end aimed at is the same in all. If the pupils have some power of speech before coming to school, or if they possess a considerable degree of hearing, their teachers, if they themselves hear and speak, usually try to improve their utterance by practice ; but no special teachers are employed for this purpose, and comparatively little attention is given to articulation and speech-reading.

The schools in America following this method are seven in number, viz., the Maryland Colored, Cincinnati Public, New Mexico, Evansville, Toledo, Eastern Iowa, and Chinchuba schools. The whole number of pupils during the year was 94.

II. *The Oral Method.*—Articulation and speech-reading, together with writing, are made the chief means of instruction, and facility in articulation and speech-reading, as well as mental development and written language, is aimed at. Signs are used as little as possible, and the manual alphabet is generally discarded altogether. There is a difference in different schools in the extent to which the use of natural signs is allowed in the early part of the course, and also in the prominence given to writing as an auxiliary to articulation and speech-reading in the course of instruction ; but they are differences only of degree, and the end aimed at is the same in all. The schools in America following this method are eighteen in number, viz., the New York Improved Instruction, Clarke, Horace Mann, Portland, Rhode Island, Milwaukee, Pennsylvania Oral, Cincinnati Oral, La Crosse, Wausau, Whipple's, German Lutheran.* Mr. Knapp's, McCowen,† Miss Keeler's, Sarah Fuller,

* *German Lutheran Institution.*—"The German language is used in the oral instruction." H. D. UHLIG, Director.

† *McCowen Oral School.*—"Oral and Aural." MISS MARY McCOWEN, Principal.

Albany, and Miss Kugler's schools. Total number of pupils during the year (not including those of Mr. Knapp's Institute, from which returns were not received), 833.

III. *The Combined System.*—Articulation and speech-reading are regarded as very important, but mental development and the acquisition of language are regarded as still more important. It is believed that in many cases mental development and the acquisition of language can be better attained by some other method than the Oral, and, so far as circumstances permit, such method is chosen for each pupil as seems best adapted to his individual case. Articulation and speech-reading are taught where the measure of success seems likely to justify the labor expended. The schools in America using some form of the Combined System are fifty-nine in number, viz., the American, New York, Pennsylvania,* Kentucky, Ohio, Virginia,* Indiana, Tennessee, North Carolina, Illinois, Georgia, South Carolina, Missouri, Louisiana, Wisconsin, Michigan, Mississippi, Iowa, Texas, Kendall, Alabama, California, Kansas, Le Couteux St. Mary's, Minnesota, Arkansas, Maryland, Nebraska, St. Joseph's,* West Virginia, Oregon, Colorado, Chicago, Central New York, Western Pennsylvania, St. Louis, Western New York, New England Industrial, Dakota, New Jersey, Utah, Northern New York, Florida, Washington State, Texas Colored, North Dakota, St. John's Catholic, Ephpheta, Maria Consilia, St. Mary's, Notre Dame, Montreal Catholic (both Male and Female), Halifax, Ontario, Mackay, Fredericton, and Manitoba schools, and the National College. The schools during the year contained 9,098 pupils, of whom 3,652 were taught articulation and speech-reading. The number taught articulation and speech-reading in each school may be ascertained from the foregoing Tabular Statement of American Schools.

The various methods in which the Combined System is applied in American schools may be classified as follows:†

A. The general instruction of the pupils is carried on chiefly by the Manual Method. Part or all of them receive special

*The Principal of the Pennsylvania Institution prefers to designate the methods there pursued as "Manual and Oral" rather than "Combined," the Principal of the Virginia Institution the methods there pursued as "Manual," and the President of the St. Joseph's Institute the methods there pursued as "Oral and Combined."

† In cases where heads of schools replying to our circular of inquiry have given some further explanation of the method pursued than is indicated by our definitions, their statements are quoted in foot-notes.

training in articulation and speech-reading. The schools following this method are twenty-three in number, viz., the American, Ohio, Virginia, Indiana, Georgia, Louisiana, Mississippi, Texas, Kansas, Oregon, Chicago, Western Pennsylvania, St. Louis, New England Industrial, Dakota, Northern New York, Texas Colored, North Dakota, Maria Consilia, Halifax, Ontario, and Fredericton schools, and the National College. Total number of pupils during the year, 2,981 ; number taught articulation and speech-reading, 852.

A. B. Part of the pupils are taught by the Manual method, others by the Oral method. Of the former, part receive special training in articulation and speech-reading. All are permitted to mingle freely with one another out of school-hours. This is the method of twelve schools, viz., the Kentucky, Illinois, Missouri, Wisconsin, Michigan, California, Minnesota,* Arkansas, Maryland, St. Joseph's,† Colorado, and Florida schools. Total number of pupils, 2,859 : number taught articulation and speech-reading, 1,190.

A. E. The general instruction of the pupils is carried on chiefly by the Manual method. Part of them receive special training in articulation and speech-reading. Some of the teachers also use articulation and speech-reading, in addition to the manual alphabet and writing, as a means of instruction with part of their pupils. This is the method of the Kendall, Central New York, and New Jersey schools, containing during the year 367 pupils, of whom 229 were taught articulation and speech-reading.

* *Minnesota School.*—“ It should also be remembered that all of our pupils make trial of articulation, and are dismissed from the oral classes upon the recommendation of the teacher of articulation, and only then when the teacher of articulation decides they are incapable of obtaining an education by the Oral method. Moreover, in class-rooms we lay great stress upon object teaching, writing from actions, and all real combinations of actions such as we are able to produce in the school-room. We resort to this method that the natural sign-language may not be made too prominent. The manual alphabet, writing, lip-reading, and articulation are freely used by the teachers and pupils in the class-room and in social intercourse. We have not yet organized a class in auricular training, although we use quite freely Carrier's ear trumpet with those who are capable of receiving instruction through the sense of hearing. I claim to use every method of instruction that seems to me of service in educating deaf children.”—J. L. NOYES, Superintendent.

† *St. Joseph's Institute.*—“ The Oral method is used except in the case of some of the older pupils, for whom we find the Combined method more advantageous.”—MADAM E. NARDIN, President.

B. Some of the pupils are taught by means of the Manual method, and others by the Oral method. These two classes are permitted to mingle freely with one another out of school-hours. This is the method of ten schools, viz., the Tennessee,* North Carolina, South Carolina, Alabama, Nebraska, West Virginia, Utah, Ephpheta, St. Mary's, and Montreal Catholic Male schools, containing during the year 1,056 pupils, of whom 445 were taught by the Oral method.

B. C. Some of the pupils are taught by means of the Manual method, and others by the Oral method. Of the latter, part are permitted to mingle freely out of school-hours with the manually-taught pupils; others are kept entirely separate from them, and from those who mingle with them, out of school-hours as well as in the school rooms. This is the method of the Pennsylvania Institution, containing during the year 490 pupils, of whom 130 were taught by the Oral method, 103 of them in a separate school. "Manual and Oral," rather than "Combined," are the terms Mr. Crouter prefers to use in describing the methods of the Institution.

B. D. Some of the pupils are taught by the Oral method; others by the manual alphabet and writing, without the use of the sign-language. The latter also receive special training in articulation and speech-reading. The two classes are permitted to mingle freely with one another out of school-hours. This is the method of the Cincinnati Notre Dame school, containing during the year 8 pupils, four of whom were taught by the Oral method.

C. Some of the pupils are taught by means of the Manual method, and others by the Oral method. These two classes are kept entirely separate out of school-hours as well as in the school-rooms. This is the method of the Montreal Catholic Female Institution, containing during the year 196 pupils, of whom 72 were taught by the Oral method.

D. The general instruction of the pupils is carried on chiefly by means of the manual alphabet and writing, without the use of the sign-language. All the pupils receive special training in articulation and speech-reading. This is the method of the Western New York Institution, which contained during the year 167 pupils. Mr. Westervelt calls this "The American Vernacular Method."

* *Tennessee School*.—"B covers our method in the main. Some pupils (semi-mutes) in Manual classes of speaking teachers are required to recite orally."—THOS. L. MOSZS, Principal.

E. The sign-language, the manual alphabet, writing, articulation, and speech-reading are all used as means of instruction, by the same teachers and with the same pupils. This method is pursued in six schools, viz., the New York,* Le Couteulx St. Mary's, Washington State, St. John's Catholic, Mackay, and Manitoba schools. Total number of pupils during the year, 665; number taught articulation and speech-reading, 534.

F. In addition to one or more of the methods above described, auricular training is given to a part of the pupils in twelve "Combined System" schools, viz., the New York, Indiana, Illinois, Mississippi, Kendall, Kansas, Le Couteulx St. Mary's, Minnesota, Arkansas, Nebraska,† and Colorado schools, and the National College. Auricular instruction is also made a prominent feature of the McCowen School.

G. The Iowa Institution was reported in 1890 as following the Combined System, but we are not informed as to which of the above sub-classes the method pursued belongs. Total number of pupils during the year, 309; number taught articulation and speech-reading, 25.

The following is a summary of the statistics of the methods of instruction in American schools, including Canada, for the year 1891:‡

Total number of pupils.....	10, 025
Number in Manual method schools.....	94
" " Oral method schools.....	833
" " Combined System schools.....	9, 098
Number taught exclusively by the Manual method.....	5, 540
" " articulation and speech-reading.....	4, 485
Number taught articulation and speech-reading in Combined System schools	3, 652
Number taught exclusively by the Oral method§	1, 484
" " articulation and speech-reading by the "Combined A" method.....	852

* *New York Institution.*—"All the pupils are taught articulation for one hour daily."—I. L. PEET, Principal.

† *Nebraska Institute.*—"Instead of saying that 'auricular training is given to a part of the pupils' in this Institute, please say that part of them are taught by the auricular method."—J. A. GILLESPIE, Superintendent.

‡ In a few cases, where the returns for the year 1891 were not received, those for 1890 are given.

§ Not including those pupils of the "Combined A. B" schools so taught, since the numbers of the "A" and "B" pupils, respectively, in these schools are not given.

Number taught by the " Combined A. B " method.....	1,190
" " " " A. E " " 	229
" " " " B " " 	445
" " " " B. C " " 	130
" " " " B. D " " 	8
" " " " C " " 	72
" " " " D " " 	167
" " " " E " " 	534
" " by Combined method not specified.....	25
Number of articulation teachers.....	288
Number of articulation teachers in Oral method schools (including principals).....	98
" " in Combined System schools (not including principals)	190
E. A. F.	

SCHOOL ITEMS.

Alabama Institute.—Mr. Osce Roberts, a former pupil, has been appointed a teacher. Miss M. Maguire, formerly of the Maryland School, has been appointed to a position in the Oral Department.

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Arkansas Institute.—Mr. Geo. S. Porter, who has for the past year and a half successfully filled the position of instructor in printing, has resigned, to take charge of the printing office of the New Jersey School. The greater inducements held out by the New Jersey School were the cause of his leaving. The vacancy has been filled by the appointment of Mr. Chancy S. Barns, of St. Louis, Mo. Mr. Barns is a skilful printer, and intends to make the teaching of the deaf his life-work.

The second volume of the admirable magazine for deaf and other children, the *Supplement to the Arkansas Mite*, was begun in December. Mr. Clarke renews his offer of last year, to send the magazine free to the first twenty teachers of the deaf who will send him matter enough, original or selected, to fill a page of the magazine.

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Central New York Institution.—Miss May Gamble has been added to the corps of instruction as assistant teacher of articulation.

Colorado School.—Mr. Geo. W. Veditz has withdrawn from the editorship of the *Index*, which is now assumed by Mr. H. M. Harbert, foreman of the printing office.

Dakota School.—Miss Emma Von Behren, who for the past two years has been matron, has been appointed teacher in the place of Mr. Frank R. Wright, resigned.

Evansville Day-School.—Last year a bill was introduced into the General Assembly to make this School a part of the State school system, so that the deaf of southern Indiana might be received and educated free of cost, but the bill was lost by just one vote.

Miss Emma T. Macy, assistant instructor, returned last autumn to resume her school duties, after an absence of half a year in Iowa.

Mr. Kerney is now visiting the Missouri, Iowa, Nebraska, Kansas, and Illinois Schools for the Deaf.

Florida Institute.—Printing has been added to the industries taught, and the publication of a semi-monthly paper, called the *Institute Herald*, was begun on the 15th of December last.

Fredericton Institution.—Mr. Willard R. Demmons, of the Normal School, has been appointed assistant teacher in place of Mr. W. O. Barnaby, resigned.

Georgia Institution.—The water-works have been extended so that, with a steam pump, four $\frac{3}{4}$ -inch streams of water can be thrown on any fire that may occur, and a hose-cart with 750 feet of $2\frac{1}{2}$ -inch fire hose has been purchased. Four handsome fire-escape stairs have been erected; also stand-pipe throughout the building, with fifteen plugs or openings, to each of which a fifty-foot section of linen hose, with hose pipe, is attached. A steam laundry has been built and equipped.

Indiana Institution.—A pamphlet called "Outlines for 1891-'92," giving full details of the work laid out for the school year, the assignment of duties for each teacher, the entertain-

ments and lectures, the course of study, etc., etc., has been published; also a separate leaflet containing the programme of the teachers' meetings.

Experiments have recently been made with the phonograph. Many of the pupils, otherwise very deaf, are enabled to hear by the aid of this instrument. Mr. Johnson regards it as equal in this respect, to say the least, to the best hearing tubes, and it has the additional advantage of enabling the pupil to see the teacher's lips at the same time that he listens to the phonograph. It is also useful in keeping a record of the pupil's progress.

Kentucky Institution.—Two assistant teachers, Miss Nellie Lyle and Miss Pattie Gentry, have been appointed. Miss Mabel Maris has been elected to the position made vacant by the resignation of Miss Frances Barker, now teaching in the Western Pennsylvania school.

Louisiana Institution.—Mr. Stephen Shuey has resigned his position as teacher to accept a similar one at the Missouri Institution, and is succeeded by Mr. H. Lorraine Tracy, a graduate of the Iowa School and National College.

Carpentry has been added to the Industrial Department.

The *Pelican*, a paper printed by the pupils, and edited by Mr. Tracy, now comes out weekly, instead of fortnightly, though in a smaller size.

Mackay Institution.—Mr. John Imrie Ashcroft, who had been connected with the Institution for eight years, first as teacher, and afterward as joint superintendent with his wife, formerly Miss H. E. McGann, died on the 29th of November last of consumption. Besides his work in Montreal, he was the founder of a school for the deaf in British Columbia, and obtained for it a government appropriation, but, owing to the small number of pupils, it was given up.

Mr. Ashcroft was a young man of high character, earnest and active in his work, and greatly respected by all who knew him.

Manitoba Institution.—The school began the session rather unfortunately. On the morning of the 27th of October a fire broke out in the attic, and before the fire department succeeded

in checking the flames the roof and upper flat of the building were totally consumed. The children were all in school at the time, and as the class-rooms are on the first floor they had no difficulty in escaping. The furniture of the institution was nearly all saved, but the officers, pupils, and servants lost the greater part of their clothing. While these effects are not included in the insurance, it is probable the Government will make an appropriation to cover a portion of the loss. The damage to the building and furniture is fully covered by the insurance, and in reinstating the Institution it is the intention of the Government to add to its appearance and convenience. The contract has already been let, but on account of the severity of the winter it is not probable school will be resumed in the building until next session. Mr. McDermid writes, however, that he is not worrying over the enforced delay, as the school is now carried on in a large and comfortable building known as the Bannatyne castle. This is a building that cost about \$100,000, and is fitted up with all the modern conveniences. Its sewerage system is in good order and the water supply comes from the city water-main. The rooms are conveniently arranged, and very little delay has been experienced in resuming regular school work, not more than ten days being lost.

Miss Augusta Spaight, a graduate of the Toronto Normal School and an expert sign-maker, having lived eight years in the Ontario Institution, has been added to the corps of instructors.

Maryland Colored Institution.—Mr. D. Edward Stauffer, Jr., has been appointed as successor to Mr. James S. Wells, whose death was mentioned in the last number of the *Annals*.

Minnesota School.—Mr. C. R. Watson, after teaching in this school for three months, received a call from the Missouri School which he desired to accept. Mr. Olof Hanson, of Minneapolis, has been induced to suspend temporarily his active duties as architect, and take Mr. Watson's place for the present.

Missouri School.—Mr. D. C. McCue has resigned the position of teacher to go into business, and Miss Eliza Reed to go to Brazil as a missionary. Mr. Stephen Shuey, a graduate of this School and of the National College, late a teacher in the

Louisiana Institution, has been added to the corps of instruction. Mr. Henry Gross succeeds Mr. Chas. M. Grow, Jr., as editor of the *Record*.

Nebraska Institute.—Mrs. Eva Comp has been added to the corps of instructors.

A new and enlarged electric plant has been put in. The work is just completed.

New England Industrial School.—Miss Lucy M. Swett has resigned her position as teacher to be married to Mr. Geo. T. Sanders, of the Volta Bureau. Miss Fidelia Sheldon, the former articulation teacher, is unable to teach this winter, and at present the School is without a regular teacher for that branch.

New Jersey School.—The old Board of Trustees has been abolished, and the School is placed in the hands of the State Board of Education. This Board are Trustees of the State School Fund from which this School draws its chief maintenance. There are three Committees for the School in common with the Normal School, one on Education, one on Buildings and Grounds, and one on Finance. The Principal of the Normal School is Secretary for the Committee on Education, and the Superintendent of the School for the Deaf is Secretary for the Committee on Buildings and Grounds.

Miss L. M. Dey, formerly a teacher in the Whipple Home School and the Pennsylvania Oral School, has been appointed teacher of articulation. Mr. George S. Porter, late of the Arkansas Institute, has been appointed instructor in printing.

North Dakota School.—Printing has been established as an industry of the School, and the publication of a fortnightly paper called the *Banner* was begun on the 5th of December last. It is edited by Mr. P. L. Axling, a teacher in the School.

Ohio Institution.—The connection between Mr. George W. Halse, teacher of the 1st Primary Class, and the Institution was severed October 26, 1891; Mr. Ira Crandon, a graduate of this Institution, and for several years past boys' attendant, was put in charge of this class.

The classes have now been at work three months under the classification provided in the new Course of Study, and Mr. Knott writes that the expectations of its success are more than realized.

Pennsylvania Home.—The Executive Committee of the Annual Philadelphia Charity Ball have decided to devote one-fourth of the proceeds of the ball this winter toward the establishment of the “Home for the Training in Speech of Deaf Children Before they are of School Age.” Out of twenty-seven charities which applied for aid, four were selected as beneficiaries.

St. Louis Day-School.—Miss Pearl Herdman has been appointed teacher of articulation in the place of Miss Helen C. Vail, resigned.

Sarah Fuller Home.—On the 8th of November last an interesting exhibition of the progress of the pupils was given at the Horace Mann School in Boston. Miss Fuller made an address, in which the history of the Home was given as follows :

The Home School which these children represent was opened in West Medford in 1888. It owes its existence to the efforts of Mrs. Francis Brooks, whose interest in the education of deaf children led her to consider the advisability of giving them an early opportunity to learn speech and written language. She thought that the time when children naturally learn to speak could be utilized by encouraging them to make vocal sounds, and by teaching them to mould those sounds into articulate speech. As but few mothers possess the requisite time and knowledge for such teaching, the practical value of her thought could be learned only through the establishment of a home school, where intelligent, patient, painstaking persons could give their entire time to the children. Early in the spring of 1888, Mrs. Brooks appealed to sympathetic friends to aid in procuring money for this purpose, and in a few weeks she received a sum sufficient to justify the beginning of the work. Twenty-five children have received the benefit of instruction in the little school. When it was first opened pupils five and six years of age were admitted, but it has become necessary, in order to provide for much younger children, to receive none who are more than five. Seven of the older children, after remaining for about a year, entered the Horace Mann School, and three went to the Clarke Institution at Northampton. The value of the preparatory training at the Home was shown by their ability to enter classes of the second grade, thus saving to them important time during the years when they would not, because of the remoteness of their homes or their age, have received instruction. * * *

Every arrangement of the Home is made directly helpful to the children gathered there. Toys and articles of furniture are labelled, the names of articles of food are shown to them at table, and directions made familiar through daily use in the living-room, school-room, and sleeping-room are found upon the walls. Play hours spent either in the open air or in a play-room especially fitted up for amusement and for games, alternate with time spent in the school-room.

The instruction in speech at first is necessarily individual, but the youngest can join in many class exercises designed to train the eye and hand. By constant repetition the very little ones learn to say the names of their playthings just as hearing children learn their first words.

Dr. Samuel Eliot closed the exercises with a short address, in which he said that if the Home stood for nothing more than to brighten the weary life of little deaf children it had earned its right to existence.

Western Pennsylvania Institution.—Miss Macmillan has been given a new class of pupils to instruct by the “pure oral” method. Miss J. B. Searles has been added to the corps to teach articulation a portion of each day to members of the manual classes.

Wisconsin School.—The following law providing for compulsory education was passed by the State legislature last year :

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows :

SECTION 1. Whenever proper affidavit shall be made before any county or municipal judge in any county in the State of Wisconsin that any deaf-mute or blind child of the proper age is deprived of a proper education by the neglect or refusal of its parents, guardians, or other persons having the custody of such child, it shall be the duty of such county or municipal judge to summon such parents, guardians, or custodians to bring such child before him, and if any material facts are disputed, it shall be his duty to summon witnesses as to facts set forth in the affidavit, or if the facts be admitted, said county or municipal judge may, in his discretion, order such child to be sent to some public or private institution for the instruction of deaf-mutes or the blind, as the case may be, but in no case so as to cause any charge to be made by such institution against the county.

SEC. 2. Hereafter the steward of the school for the deaf at Delavan and the steward of the school for the blind at Janesville may pay the actual and necessary expenses of indigent people in going and returning from said institution.

SEC. 3. It shall be the duty of each county and city superintendent of schools to send to the superintendent of the State school for the deaf at

Delavan and to the superintendent of the State school for the blind at Janesville the address of parents, with the name and age of each deaf or blind child known to be in his county or city, and to inform parents, guardians, and custodians of deaf-mutes and blind children in his county or city respecting the several schools for deaf-mutes and the blind in the State and the conditions of admission to them; and for this purpose, the superintendents of such institutions shall provide each such superintendent with sufficient printed information and with the names and residences of all deaf-mutes and blind children known to be in his county or city. And each such superintendent shall include in his annual report to the county board of supervisors or the city board of education a statement of the number of deaf-mutes and of blind children of school age in such county or city then receiving an education, of the number of each not receiving an education, and of the number of personal visits he has made during the year upon the parents, guardians, or custodians of such children, to induce them to give such children a proper education.

SEC. 4. This act shall take effect and be in force from and after its passage and publication.

Approved April 22, 1891: published April 28, 1891.

MISCELLANEOUS.

The Hygienic Value of Speech.—A friend calls our attention to the following remarks on the hygienic value of teaching speech to the deaf, in a review by Mr. Albert Gutzmann, of the Berlin City School, of Mr. Heidsiek's "Deaf-Mute's Cry of Distress," published in the *Medizinisch-pädagogische Monatschrift* for April, 1891:

There is one point, however, of very great importance which Mr. Heidsiek, in his ardor against the oral method, has entirely overlooked and failed to notice. It is the hygienic importance of teaching speech to the deaf-mute. The medical deaf-mute literature emphasizes with perfect right the important bearing which the oral method of instruction has upon the health of pupils. I beg to refer here to a publication of mine, "The Gymnastics of Deaf-Mutes," in which I speak of this subject fully. The same may be said of the work of Edward Schmalz, entitled "Deaf-Mutes and their Education, medically, statistically, pedagogically, and historically considered," 1848. I will here only cite a paragraph contained in the latter work, quoted from the Russian physician Dr. Person, in his work entitled "Some Remarks concerning Deafness," where he says: "Aside from the valuable service which the teaching of speech confers upon deaf-mutes in enabling them to have intercourse with others, there is another and highly important advantage it confers in the beneficent effect it exerts upon the health by strengthening the lungs. As deaf-mutism leaves the lungs without the requisite exercise, these organs become so weakened that an ordinary catarrh very easily assumes

the phase of consumption. This would be incurable, if at the same time a scrofulous condition of the system prevails. This, alas! is so frequently the case, that only a few pupils of the St. Petersburg Institution are exempt from it, * * * whereas in Germany, where the teaching of speech constitutes the main part of their training, I found the greater part of the pupils in a healthy condition. While fully appreciating the beneficent influence of a milder climate and of gymnastic exercises, nevertheless I must ascribe the instruction given in speech (which nature itself constitutes the main means of strengthening those organs of the chest which in deaf-mutes are always weak) as the most important factor. Speech is for the deaf-mute the true hygienic gymnastic exercise."

Schmalz, and also Meissner and others, coincide entirely with these views, and if of late years the medical profession has given this subject but little attention it is because all of the institutions for the deaf are now conducted upon the oral method. The teaching of speech is thus a vital question for the deaf. Therefore, oral exercises should be conducted with all deaf children, even the weakest, no matter if the vocabulary taught should prove to be very limited.

On the other hand, Dr. Hartmann, also an advocate of the oral method, and a medical authority of high standing, in his work on "Deaf-Mutism" (Stuttgart, 1880), ridicules the idea that speech is essential to a proper development of the lungs. He says:

Children born deaf cry after their birth in just the same manner as those who hear; their lungs, therefore, are subject in early childhood to the same influences. Moreover, deaf-mutes of more advanced age by no means allow their voices to rest; they often, indeed, feel obliged to let them sound forth, not always to the delight of their hearing fellow-men. * * * Aside from this, at the age at which vigorous movements of the body are produced, *the development of the lungs takes place perfectly by their expansion in breathing.*

The United States, where both the manual and oral methods are practised under the same climatic and other hygienic conditions, and often in the same schools, affords the best possible field for testing this disputed question. We hope that statistics on the subject will be carefully collected in all our schools.

A Note from Mr. Westervelt.—Mr. Z. F. Westervelt, Secretary of the American Association to Promote the Teaching of Speech to the Deaf, sends us the following note for publication in the *Annals*:

In Dr. Gallaudet's Glasgow address, as it has been widely published, appears the following quotation: "Promoters of one method of teaching have often sought, ungenerously, to advance their own cause by undervaluing the merits of that of their opponents, and have, not infre-

quently, caused or permitted misrepresentations to be circulated, which have proved seriously misleading to the public. For example, a few months since a leading New York newspaper published an 'interview' with a prominent principal of a school for the deaf who had a short time before been appointed secretary of a new association for promoting oral teaching. This gentleman was made to say: 'It has now been demonstrated beyond cavil that all deaf-mutes can be taught to speak,' and when asked if he had been correctly reported, he laughed and replied: 'Oh, no; I said no such thing.' And yet, so far as the speaker is aware, no public correction of this most unwarranted statement has ever been made by the person with whose name it was connected, *apparently* by his own authority." I understand that an edition of Dr. Gallaudet's address, edited and revised by the author, is being published by the Volta Bureau as a special Bulletin, with the above paragraph omitted.

I beg to state the facts of the case, which are as follows: The report of the New York *Tribune* made erroneous statements other than the one referred to by Dr. Gallaudet, and at once I sought to have the misstatements corrected through the columns of the *Tribune*. Later in the morning of the day on which the article referred to by Dr. Gallaudet was published, I had an interview with the manager of the Associated Press at his office in New York city, and gave him a written correction of my remarks in the interview of the evening before, with the request that it should be sent to all newspapers in the Press Association; this he promised to do. The same written correction of the interview was on the same day given to newspapers not connected with the Associated Press, and was, by them, subsequently published in full.

Although I did not make the statement referred to by Dr. Gallaudet I do not wish to be understood as either affirming or denying "that deaf-mutes can be taught to speak."

Helen Keller's Teacher.—Miss Annie M. Sullivan, the accomplished teacher to whose judicious training Helen Keller owes so much, has been bitten by a mad dog—probably the "great faithful mastiff" mentioned in Helen's second letter to Miss Fuller, published in the present number of the *Annals*. Miss Sullivan was treated at the Pasteur Institute in New York a few days afterwards, and strong hopes are entertained that the treatment has been successful.

The Seventh Conference.—The Seventh Conference of Principals and Superintendents of American Institutions for the Deaf will meet at the Colorado Institution, Colorado Springs, Colorado, on Saturday, July 9, 1892. Further particulars will be given in the next number of the *Annals*.

Bonet's Work.—The price of the English translation of this valuable work (see the last volume of the *Annals*, page 142) has been reduced to fifty cents, post free. It may be obtained of Mr. Abraham Farrar, Beech Grove, Harrogate, England.

Statistics of German Schools.—Mr. W. Reuschert, of Strassburg, in the *Organ* for September, 1891, gives the following table of Statistics of German Schools for the Deaf:

STATE.	SCHOOLS.				NUMBER OF PUPILS.			Classes.	TEACHERS.		
	Boarding.	Day.	Mixed.	Total.	Male.	Female.	Total.		Male.	Female.	Total.
Prussia	6	33	8	47	2,340	1,766	4,106	378	389	24	413
Bavaria.....	12	3	...	15	315	277	592	62	37	14	51
Württemberg.....	5	2	1	8	182	162	344	40	28	10	38
Saxony	2	...	1	3	226	170	396	37	39	1	40
Baden	3	...	...	3	115	88	203	20	23	1	24
Hesse .....	...	2	...	2	69	46	115	12	14	....	14
Alsace-Lorraine	4	...	...	4	89	85	174	20	12	12	24
Other States.....	2	9	9	13	269	182	451	48	46	3	49
Total.....	34	49	12	95	3,605	2,776	6,381	617	588	65	653

Mr. Reuschert also gives the following statistics of the Schools for the Deaf in Germany and the adjacent countries in which German is spoken:

STATE.	SCHOOLS.				NUMBER OF PUPILS.			Classes.	TEACHERS.		
	Boarding.	Day.	Mixed.	Total.	Male.	Female.	Total.		Male.	Female.	Total.
Germany	34	49	12	95	3,605	2,776	6,381	617	588	65	653
Austria-Hungary	16	5	4	25	858	698	1,556	121	104	28	132
Switzerland	14	...	1	15	245	204	449	53	30	19	49
Luxembourg	1	...	...	1	16	7	23	3	3	....	3
Russian Baltic Province....	2	1	1	4	83	77	160	15	10	6	16
Total.....	67	55	18	140	4,807	3,762	8,569	809	735	118	853

Census Statistics of Schools.—Census Bulletin No. 140, published November 9, 1891, gives a series of tables concerning the principal schools for the deaf in the United States, showing the number of pupils under instruction from 1840 to 1889, with distinction of sex; and also, for the public schools,

the expenditures for the same period, divided, as far as possible, into current expenditures and those incurred for building.

The average annual number of pupils in these public schools was 501 in the decade 1840 to 1849, 912 in the decade 1850 to 1859, 1,563 in the decade 1860 to 1869, 3,159 in the decade 1870 to 1879, and 5,910 in the decade 1880 to 1889.

The reports of expenditures received from the schools were incomplete. Taking those institutions which made complete reports, the average annual cost per pupil in the public schools, including both building and current expenditures, was \$271 in 1889 and \$252 for the decade 1880 to 1889. The average annual cost for the two previous decades was \$256 for 1860 to 1869 and \$275 for 1870 to 1879. The average annual cost for current expenditures, excluding building, was for 1889 \$206, and for the ten years 1880 to 1889, \$207 per pupil.

"The Visible Speech Pioneer."—Mr. John Hitz, Superintendent of the Volta Bureau, Washington, D. C., requests us to publish the following communication:

In 1874, a manuscript periodical, entitled *The Visible Speech Pioneer*, conducted by Dr. A. Graham Bell, was circulated among the institutions and schools employing visible speech. The Volta Bureau has succeeded in obtaining for preservation two numbers—No. 4, dated April 13, 1874, and No. 5, dated April 27, 1874. Should any of your readers know where the other numbers may be found, this Bureau would be glad of the information.

Periodicals.—The *Deaf Mutes' Register*, published at the Central New York Institution, but, we believe, independently of the Institution, is now under the direction of Mr. F. L. Seliney, general manager, and Messrs. J. Holbrook Eddy, Thomas H. Jewell, and Wm. Martin Chamberlain, editorial staff. It has been enlarged to ten pages, and devotes much space to special correspondence from various centres of interest.

Messrs. Ed. I. Holycross & Co., of Dayton, Ohio, announce a new weekly periodical, called the *Silent Press*, to begin on the first of this month.

The *Deaf and Dumb Times*, of Leeds, England, has been succeeded by the *Deaf Chronicle*. The publishers are Messrs. Hepworth & Lund, 16 Howarth Place, Camp Road, Leeds, England. Messrs. H. B. Beale and A. M. Cuttall compose the editorial staff, and Mr. C. Gorham, late editor of the *Times*, will render such assistance as he may be able.

E. A. F.

AMERICAN ANNALS OF THE DEAF.

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MEMORY IN THE EDUCATION OF THE DEAF.

DURING the past year there has been considerable discussion concerning the place of memory in the education of the deaf, but the subject is one that will bear far more attention than it has yet received before definite or profitable conclusions can be reached. It is somewhat surprising that the methods of teaching classical and foreign languages, with which the literature of pedagogy abounds, should have received, comparatively, so little attention from teachers of the deaf, for the methods employed in teaching these languages are rich in suggestion to all who are trying to impart to the deaf a knowledge of English speech. It is important, in treating this question of memory, to remember the feeling which it is likely to excite, and to admit the justice of it, for the abuse of this power in the old practice of rote-teaching, concert-teaching, and *memoriter* recitations has undoubtedly worked incalculable mischief in the education of children. These evils have, however, been almost if not entirely removed, so far as they are the result of instruction, and although they still form to some educational writers easy subjects for declamation, the theme has grown somewhat threadbare, and does not seem to have much pertinency in the special and restrictive work of language teaching.

Much ambiguity and much indefiniteness of thought would be avoided if those discussing psychological questions would begin with some authorized and accepted definition or description of the subject they intend to investigate. What it is that constitutes memory is a very interesting question, and any one entering upon it would have to deal with matters of a highly abstruse and recondite character. The opinions of leading psychologists on this question might have some value to

the student, but it may fairly be presumed that the authorities on this subject are available to all teachers of the deaf, and need not be cited here. Kant's division of memory into its mechanical, artificial, and judicial functions (*Cyclopedia of Education*, New York, 1877, *Memory*), has some advantages, but for definiteness, brevity, and clearness, I prefer the pithy description of memory by Noah Porter to any that I have been able to find. "Memory," he says, "as distinguished from representation, is an act of knowledge." (*Elements of Intellectual Science*, p. 257.) It is the presence of this element of cognition in memory that differentiates it from the mere passive state of representation, and gives it the name of the recognizing faculty. The power to retain, without any knowledge of what is thus retained, is not properly memory. It is true that, in popular language, this act is sometimes called memory, but it is no more memory than a speech from a phonograph is. In making this plea for the use of memory in our schools, it is far from my purpose to lend encouragement to any system of cramming, or to any practice of making the memory a portative faculty, to be freighted with names and dates and geographical conundrums, or to any system of cultivating the memory to the detriment of other mental processes; nor, on the other hand, should it be considered any fault of instruction if the work of our pupils happens to reveal bits of memory in wholly inappropriate places, for that sort of infelicity it is impossible wholly to suppress as long as the deaf have access to books and papers, and as long as the human mind acts as we know it does.

The distinction of memory into spontaneous and intentional, by Noah Porter, is one well worth noting, for it illustrates the difference between the condition of a hearing child and of a deaf child in learning the national language. The infant, during the period of developing perceptions, is wholly passive. As the sense of hearing begins to assert itself, the muscular vibration accompanying it gives the child so much pleasure that this purely physical sensation leads it to imitate what it sees and hears, without any use of the reflective faculties. The words and phrases that a child tries to imitate are those he has heard so often that they spring to his lips spontaneously. He laughs and crows at his success, until at last, without teacher or teaching, method or system, grammar or text-books, he has grown into possession of his mother tongue.

To this purely natural, harmonious development, the growth of a deaf child forms no analogy. The joy and spontaneity of the physical beginning of life have long since passed away when his education in language begins. Kicking and rolling on the floor of the nursery, catching the sunbeams, cooing and attempting wonderful things in speech, are actions correlated to the condition of infancy; but the bare imagination of a class of fifteen new pupils beginning the study of English after this purely natural method is surely enough to take all the poetry out of it. If those who talk so incessantly of following nature and using the natural method would only remember that this is a method of induction—the nearest approximation possible to the way hearing children learn language; a method dispensing with the rules and definitions of grammar, but not necessarily with principles of orderly procedure, they would cease to object to the memorizing of language. It is only by intense acts of attention, by faculties constantly active, by unceasing efforts to recollect, that a deaf-mute can make any progress in language—a process that differs *toto cœlo* from the passivities of infancy. But here an important truth must be noted. This intentional memory—by incessant, ever recurrent, visual presentations, by repeating words and phrases over and over again until the effort to remember ceases to be necessary, and the mind responds to the demands of language without conscious volition—becomes at last so spontaneous as to lose its intentional character. This is the condition to which the deaf must aspire, and to which we must try to lead them. The value of articulation in this particular is unquestionably great. The greatest good, however, in my judgment, is not the speech, nor the lip-reading, but the mental result which comes from a close co-ordination of lips and mind when both are working together rationally. But in whatever way a child is taught, there must be a continuous presentation of language, by spelling, writing, translation, by school-room charts in large print, and every-day practice in reading and memorizing language.

It may here be worth recording what the literature of pedagogy has to say on this matter of memory. The question with us is not the wisdom of committing to memory lessons in our own vernacular, but the wholly different one of the method to be pursued in studying a language not our own, and on this single question there is a consensus of opinion that leaves no

doubt as to the pedagogical answer to the question. From Melancthon (1497-1560), who required his pupils to learn twelve lines of Horace a day, to Sturm (1507-1589), Comenius (1592-1671), Ratich (1571-1635), Jacotot (1770-1840), and the famous Jesuit schools, with Roger Ascham (1515-1568), Milton (1608-1674), Locke (1632-1704), and Calderwood, Prendergast, Thring, Quick, and Fitch of our own day, there is no substantial difference of opinion on the wisdom of memorizing a new language.

The singular success of the Jesuit schools in teaching Latin must have been due to something in their methods, and the secret of it all was undoubtedly this: "That the lessons may not be beyond the grasp of an ordinary memory, they are made very short, and, being often repeated, cannot easily be forgotten." (*German Teachers and Education*, Barnard, p. 244.) With this memorizing there was constant conversation, and a continual exposition of what was thus acquired.

Sturm, one of the early German reformers in education, was one of the first to reject the article, noun, adjective way of teaching. He undoubtedly exaggerated the value of classical studies, but he never seems to have raised the question of the practical value of memorizing Latin at a certain grade of school-life.

Just what the method of Roger Ascham was it is somewhat difficult to determine. We know that he was a friend and correspondent of Sturm, and may fairly infer that their methods were the same. The emphasis in the system of Ascham was upon double translation. This single exercise in schools where signs are used is a discipline so valuable that its real merits cannot be too highly esteemed. To stand before a class at some appointed hour of the day and act or sign out a bit of history, biography, some newspaper event, or a striking story, and then require the class to produce it in writing, brings into operation all the powers of the mind. Such an exercise demands thought, judgment, discrimination in the use of words, memory, reason, and logical arrangement. It is true that these are exercised in a very elementary way, but that is all that can be expected at first. I believe such pieces of composition, corrected, written, and reviewed, have an educational power of the highest value. This was the essence of Ascham's method, and of Queen Elizabeth he was able to say that, besides her perfect reading in Latin, Italian, French, and Span-

ish, she read more Greek in a day than a prebendary of the church read Latin in a year. At the age of twelve, this marvellous Elizabeth translated "Prayer and Meditations" into Latin, French, and Italian. He must have been a rare teacher who could so teach that Lady Jane Grey, before she was sixteen years of age, could bury herself in a copy of Plato's *Phædo*, and find so much enjoyment in this Greek reading as readily to deny herself the amusements of the royal household.

Few men have been more severe on stereotyped and mechanical methods of teaching than John Locke; yet this sturdy philosopher, condemning as he does in no measured terms the practice of *memoriter* recitations, when he comes to speak of the study of language, has to admit the need of memorizing, and says: "For languages, being to be learned by rote, custom, and memory, are then spoken in greatest perfection when all rules of grammar are utterly forgotten." (Locke on Education.) The force of this admission can only be measured when one remembers the vigor with which he assails the habit of learning by rote.

"No doubt," says Calderwood (On Teaching), "all children must commit to memory many things they do not understand. Such storing of the memory belongs, less or more, to all knowledge." (Cyclopedia of Education, p. 561.)

One of the great educators of modern times was Dr. Thring, for many years head-master of the Uppingham School in England. There is an interesting article on Dr. Thring and his school in the *Century* (vol. xxxvi, pp. 643-657), but Dr. Thring is probably better known by his book on "School and Education," in which he discusses a number of educational problems. This is what he has to say on the subject of memorizing:

It must be borne in mind that with the young memory is strong and logical perception weak. All teaching should start on this undoubted fact. It sounds very fascinating to talk about *understanding everything and learning everything thoroughly* [the italics are his], and all those broad phrases which plump down on a difficulty and hide it. But, in practice, they are on a par with telling a boy to mind that he does not go into the water till he has learned to swim. (Education and School, pp. 213-214.)

Parents do not wait till their children understand everything before they teach them to talk, and could not if they would, because of the parrot-power of the child. (*Ibid.* p. 215.)

If Dr. Thring had been endowed with the power of prevision he could not have anticipated more accurately some of the remarks made during the past year on this question. I can

thoroughly understand the feeling of dissatisfaction that leads one to wish with unutterable longing for a "wider horizon," but, until the art of expression is acquired, the attempt to develop power by urging our pupils to think, to reason, to originate will end in nothing but disappointment. To write consecutively on some original subject, in an artificial language, requires mental culture of the highest order. Such an accomplishment comes only after the power of expression has been developed by years of practice. We talk about teaching our pupils to think, when, as one of our college presidents has said, we might as well talk of teaching them to digest. Care in providing material that shall induce thought, encourage and require it, is as far as we may go. The deaf, as a matter of fact, think hard enough: it is when they come to express thoughts in writing that they are perplexed. When a deaf child writes, "You shook him with hands," the idea in his mind is correct enough, and the required number of words are there. The fault lies in missing the order, and this can only be remedied by the power of memory.

A notable series of "Lectures on Education," published in book form, are those delivered in the University of Cambridge, England, by J. G. Fitch. The book is modern, and may be said to represent the best thought on educational subjects. When this author criticizes the abuse of memorizing, there will be few to dissent from the correctness of his judgment; and when again, after a careful consideration of the case, he recommends learning Latin by heart and memorizing foreign languages (pp. 243, 251), the high authoritative character of his opinion ought to have due weight. Pedagogy, as a distinct department, has not yet produced much original work in the United States, with the exception of the excellent work done by Barnard; but concerning the place of memory in education the following adds emphasis to what has been already said:

The methods of education should recognize the wise arrangement of nature in developing and maturing the memory. In the early period of life, the spontaneous memory should be stimulated and enriched by appropriate studies. The child should learn stories, verses, poems, facts, dates, as freely and as accurately as it can be made to respond to facts. . . .

To anticipate the development of the reflecting powers, by forcing upon the intellect studies which imply and require these capacities, commit the double error of misusing time, which is especially appropriate to simple acquisition, and of constraining the intellect to efforts which are untimely and unnatural. (Human Intellect, Noah Porter, p. 326)

One of the most successful teachers of deaf-mutes it has been my privilege to know was the late B. D. Pettengill, of Philadelphia. He has given us, in the *Annals*, his theory and his practice of teaching. After describing the preliminary steps of his method, he says:

Then we cause the pupils to write and perfectly commit to memory about one hundred short stories, expressed in the simplest language, in the past tense, and told to them by signs. (*Annals*, vol. xxvi, p. 210.)

My purpose in these quotations is to note the uniformity of authoritative opinion on this subject of memorizing. I must not be considered as approving of everything that these men say. Had I time, I could develop the fact that too close attention to mere expression in classical and foreign languages has left the mind undeveloped, undisciplined, possessing indeed surface accomplishments, the prunes and prisms of education, while breadth and capacity have been sacrificed. To devote the whole time to memorizing would be as unfortunate as not to use any. My only plea is, that the possibilities wrapped up in this function of the brain be permitted to do their appointed work in acquiring word-power. There are too many illustrations of what has been done by memorizing to question for a moment its value. Milton wrote graceful Latin poems, and Coleridge wrote in Greek. Indeed, the attainments of the scholars of the generations gone by in classical studies are evidence of the success which attended the old methods of teaching.

There is a prevalent notion that a strong memory is in some way inimical to those higher processes of mind which we dignify by the name of thought, reflection, and reasoning. We have evidence enough, however, to convince the most skeptical that learning by heart does not interfere with nor check the development of the mind, if the method of education be philosophically conducted. John Stuart Mill, at three years of age, was committing to memory lists of Latin words, and was thus enabled, at an early age, to read Latin readily. Bossuet at an early age was brought before the distinguished circle that met at the Hotel de Rambouillet, and delivered there a sermon from memory with so much grace as to win the applause of his hearers. Is there no connection between this early habit and the after fame of this eloquent French bishop? Leibnitz, one of the most famous philosophers, and Euler, the mathematician, both committed to memory the whole of the

which come into the mind through a fixed, invariable order, incapable of being available for purposes of thought. If we analyze the subject carefully, we shall find that all processes are built upon the strength of the power of memory. It is from this power that we generalize, abstract, compare, name, reason, explain, account for, and perform. The microscopic power covered by the word memory which has attended the education of a child is a great measure to the girl's wonder and tenacious that everything she recollects. Persistent memory work of very simple nature, followed by an analysis of the whole, is the main work in acquiring language. The main work is committing to memory easy language during the early years of a pupil's course.

Attention.

Attention is under the control of the will and is not under the control of the pupil himself. A child whose habits of attention are not trained needs discipline of the power of concentration so necessary for successful work. To permit a child in even the simplest lesson, requiring nothing but

the accurate performance of it gratifies him. There are pupils in all our classes who must go through this process of learning by heart if they are to carry away any understanding of what they have studied. Incongruities of memory will continually obtrude themselves, but the teacher should not let these things perplex him. He must know that ingenuity in the arrangement of words is a power that comes very slowly, and only after considerable progress has been made and the maturing process of development has given strength to the mind. There are hundreds of our pupils who could tell us of seeing "a poor, weak old man," but how many would ever of themselves think of saying "an old man, poor and weak." In this particular the deaf certainly have no imagination.

c. Interest must be roused.

The memory of language depends partly upon the vividness of the impression with which it is first received. The deaf are anxious to get information. Short lessons in history, especially those treating of famous men, never fail to arouse their interest. Anything else that will win their interest and attention is profitable, but it would be folly to ignore the special advantages of history in keeping up the enthusiasm of a class.

d. Memory necessitates repetition.

This is the secret of all success in reading and writing an artificial language. In no other way can the deaf get the repetition which the mind demands than by this process of memorizing. It must not be expected that what is learned in this way will be immediately available for original thought; that will require time; but when the eye meets again on the printed page words and phrases once memorized they are more readily recognized. The nearest approach to the natural way in which children learn their mother tongue is the spelling, reading, and re-reading necessary to fix the idiom of a language permanently in the mind, and, without this labor, I do not see how a deaf child can ever become naturalized to the national speech.

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ASKED, SAID, TOLD.

THERE is no greater field for language work in a young class than upon the constructions involved in the use of *asked*, *said*, and *told*. No language forms are more needed to enable a deaf child to express the thoughts and feelings which arise from his intercourse with the people about him.

That language should be imparted to the deaf in a practical, natural order, is conceded by all instructors. What can be more practical, more natural, than to teach what the child desires to make use of daily? If we listen to a group of hearing and speaking children, how often we catch these words: "I asked mamma, and she said —;" "Papa told me that —," etc. We hear these words constantly, for children talk about what they are interested in, and they are more interested in what their parents, brothers, sisters, and playmates think, do, and say than in anything else.

A deaf child is like all other children; he thinks much the same thoughts, and in consequence desires to tell the same things and to make the same requests. We must, as rapidly as possible, supply the language in which he may express these thoughts, or allow him to stumble lamely on, forming the habit of saying what he does not mean, because he is forced to pass over or to evade the *real* thought for want of the proper language in which to express it. Without the *asked*, *said*, and *told* constructions, nearly all connected language written by the pupil will be incomplete and more or less disjointed.

In narration, he must be able to tell what was *said* as well as what was *done*, so that the bearing of one thought or act upon another may not be lost and the meaning rendered unintelligible. For instance, take the following original exercise, attempted by a pupil before these constructions had been taught, and compare it with the accompanying one written by the teacher, giving expression to the child's real meaning after she had discovered it by questioning:

What the Pupil said.

Yesterday evening I could not find my slate.

Maggie Field had it.

What she meant to say.

Yesterday evening I could not find my slate, and I *asked* Mary if she knew where it was.

She *said that* Maggie Field had it.

I went to her but she did not have it.

I saw Louise Miller writing a story on it.

I wanted it. It was not my slate.

Then I showed my name on it to her. She knew it was my slate.

She wanted to keep her story and she would not give the slate to me.

She was mean and she made a face at me.

I almost cried because I could not write my lesson.

This morning I came to school.

I did not write my lesson last evening.

Louise would not give my slate to me.

My teacher was surprised that Louise was selfish. She wrote a note and I carried it to Louise's teacher. She read it and wash the story off the slate and give it to me.

Louise washed the story off the slate and gave it to me.

She was very angry and will wash my story off my slate this evening.

If this subject is examined carefully it will be found that there are many simple ideas which cannot be expressed at all without these constructions. Suppose a child wishes permission to make inquiry concerning Miss L.'s mother, who is known to be ill. He cannot ask for that permission without using the form, "May I *ask* Miss L. *if* her mother is better?" or "May I *ask* Miss L. *how* her mother is?" or "May I *ask* Miss L. *about* her mother?" He cannot give you the idea contained in this sentence, "Father *told* me *not to lend* my skates to the *boys*," without using the form "*told—not to*," or "*told—that—must not*."

There are any number of similar examples, and a pupil will not wait two, three, and four years before he attempts to express such ideas. If we do not give him the proper language

I went to her, but she did not have it.

I saw Louise Miller writing a story on it.

I *asked* her *for* it, but she *said that* it was not my slate. I *said* that it was.

Then I showed my name on it to her and *told* her *that* she knew it was my slate.

She *said that* she *wanted to keep* her story, and *that* she *would not* give the slate to me.

I *told* her *that* she was mean, and she made a face at me.

I almost cried because I could not write my lesson.

This morning I came to school, and my teacher *asked* me *why* I did not write my lesson last evening.

Then I told her about Louise.

She said that she was surprised that Louise was selfish. She wrote a note and I carried it to Louise's teacher. She read it, and *told* Louise *to wash* the story off the slate and *give* it to me.

Louise did.

She was very angry, and *said that* she *would wash* my lesson off my slate this evening.

constructions, he will be forced to resort to and depend upon signs—a habit that, from the beginning of a deaf child's school life, should be discouraged and rendered unnecessary as far as possible.

Generally speaking, when a pupil is able to write sentences expressing original connected ideas, using the personal pronouns, the present, past, and future tenses of verbs, and is able to use the imperative mood of verbs and to ask and to answer simple questions, he is ready for *asked, said, and told*.

He must first be able to understand and correctly use the simple sentences, "I want a new book," and "Please give me a new book," before he can intelligently read or write, "John asked Mr. N. for a new book." He must not be required to read or to write, "Mr. N. *asked* me *why* I did not come to school yesterday, and I said that I was sick," until he can understand Mr. N.'s question and many similar ones, and can answer them in correct language.

With an entering class of average age and ability the work which must necessarily precede the introduction of *asked, said, and told* can be done during the first year and the early weeks of the second. Then the following constructions may safely be given :

OUTLINE OF ASKED AND TOLD CONSTRUCTIONS WITH THE VERB TO GO.

(8)

Outline of directions to be given by the teacher to a pupil. Ex.: The teacher, addressing Frank, says: "Tell John to go to the door."

Tell — to go —.
Tell — not to go —.
Tell — that — must go.
Tell — that — must not go.
Ask — to go.

Ask — if — — (go) — — .
 (goes)
 Ask — if — — want — .
 (shall)
 Ask — if — — (will) go — .
 Ask — if — — may go — .
 Ask — if — — can go — .
 Ask — if — — (want) — — to go
 (wants ,
 Ask — if — — wanted to go .
 (want)
 Ask — if — — wants — — to go
 (wanted)

(b)

Outline of what the pupil must say in carrying out the direction given by the teacher. Ex.: Frank, addressing John, must say: "Go to the door."

Go —.
Do not go —.
— must go —.
— must not go.
Please go —.

— ASKED — IF —.

{ Do } — go — ?
{ Does }
Did — go — ?
(Shall) — go — ?
(Will)
May — go — ?
Can — go — ?
(Do) — want to
{ Does }
Did — want to go —
(Do)
{ Does } — want —
(Did)

③

Outline of what the class writes in telling what has been said. Ex.: "Frank told John to go to the door."

— told — to go —.
— told — not to go —.
— told — must go —.
— told — must not go —.
— asked — to go.

— asked — if — went —.
— asked — if — went —.
— asked — if — (should) go —.
— asked — if — might go —.
— asked — if — could go —.
— asked — if — wanted to go —.
— asked — if — wanted to go —.
— asked — if — wanted — to go —.

— ASKED — WHO —.

Ask — who — (go) —.
 (goes)
 Ask — who went —.
 Ask — who — (shall) — go —.
 (will)
 Ask — who may go —.
 Ask — who can go —.
 Ask — who — (want) — to go —.
 (wants)
 Ask — who wanted to go —.
 (want)
 Ask — who — wants — to go —.
 (wanted)

Who — (go) — ?
 (goes)
 Who went — ?
 Who — (shall) — go — ?
 (will)
 Who may go — ?
 Who can go — ?
 Who — (want) — to go — ?
 (wants)
 Who wanted to go — ?
 (want)
 Who — wants — to go ?
 (wanted)

— asked — who went —.
 — asked — who went —.
 — asked — who — (should) — go.
 (would)
 — asked — who might go —.
 — asked — who could go —.
 — asked — who wanted to go —.
 — asked — who wanted to go —.
 — asked — who wanted — to go —.

— ASKED — WHERE —.

Ask — where — (go) —.
 (goes.)
 Ask — where — went.
 Ask — where — (shall) — go.
 (will)
 Ask — where — may go.
 Ask — where — can go.
 Ask — where — (want) — to go.
 (wants)
 Ask — where — wanted to go.
 (want)
 Ask — where — wants — to go.
 (wanted)

Where — (do) — go — ?
 (does)
 Where did — go — ?
 Where — (shall) — go — ?
 (will)
 Where may — go — ?
 Where can — go — ?
 Where — (do) — want to go ?
 (does)
 Where did — want to go ?
 (do)
 Where — does — want — to go ?
 (did)

— asked — where — went —.
 — asked — where — went —.
 — asked — where — (should) — go —.
 (would)
 — asked — where — might go —.
 — asked — where — could go —.
 — asked — where — wanted to go —.
 — asked — where — wanted to go —.
 — asked — where — wanted — to go —.

— ASKED — WHY —.

Ask — why — (go) —.	Why (do) — go —?	— asked — why — went —.
Ask — why — (do not) go.	Why (do) — not go —?	— asked — why — did not go —.
Ask — why — went.	Why did — go —?	— asked — why — went —.
Ask — why — did not go.	Why did — not go —?	— asked — why — did not go —.
Ask — why — (shall) go.	Why (shall) — go —?	— asked — why — (should) go —.
Ask — why — (will not) go.	Why (shall) — not go —?	— asked — why — (should) not go —.
Ask — why — (may) go.	Why (may) — (go) —?	— asked — why — (might go.)
Ask — why — (cannot) go.	Why (can) — (go) —?	— asked — why — (could go.)
Ask — why — (want) to go.	Why (do) — want to go —?	— asked — why — wanted to go —.
Ask — why — (do not want) to go.	Why (do) — not want to go —?	— asked — why — did not want to go —.
Ask — why — wanted to go.	Why did — want to go —?	— asked — why — wanted to go.
Ask — why — did not want to go.	Why did — not want to go —?	— asked — why — did not want to go.
Ask — why — (want)	(do)	— asked — why — wanted — to go.
Ask — why — wants — to go.	(does) — want — to go?	
Ask — why — (wanted)	(did)	
Ask — why — (do not want)	(do)	
Ask — why — does not want — to go.	(does) — not want — to go?	— asked — why — did not want — to go.
Ask — why — (did not want)	(did)	

— ASKED — WHEN —

Ask — when —	(go) (goes)	When (do) (does) — go —?	— asked — when — went —.
Ask — when —	went —.	When did — go —?	— asked — when — went —.
Ask — when —	(will) (shall) go.	When (shall) (will) — go —?	— asked — when — (should) would go —.
Ask — when —	may go.	When may — go —?	— asked — when — might go —.
Ask — when —	can go.	When can — go —?	— asked — when — could go —.
Ask — when —	(want) (wants) to go.	When (do) (does) — want to go?	— asked — when — wanted to go —.
Ask — when —	wanted to go.	When did — want to go?	— asked — when — wanted to go —.
Ask — when —	(want) (wants) — to go.	When (do) (does) — want — to go?	— asked — when — wanted — to go —.

— ASKED — HOW —

Ask — how —	(go.) (goes.)	How (do) (does) — go —?	— asked — how — went —.
Ask — how —	went.	How did — go —?	— asked — how — went —.
Ask — how —	(shall) (will) go.	How (shall) (will) — go —?	— asked — how — (should) would go.
Ask — how —	may go.	How can — go —?	— asked — how — could go.
Ask — how —	(want) (wants) to go.	How (do) (does) — want to go —?	— asked — how — wanted to go.
Ask — how —	wanted to go.	How did — want to go —?	— asked — how — wanted to go.
Ask — how —	(want) (wants) — to go.	How (do) (does) — want — to go?	— asked — how — wanted — to go.

— ASKED — WHOM —.

Ask — — — whom — — { go } — (goes)	— whom { do } — go (does)	— asked — — — whom — wen —.
Ask — — — whom — went —	— whom did — go —	— asked — — — whom — went —.
Ask — — — whom — — { shall } go. { will }	— whom { shall } — go — { will }	— asked — — — whom — — { should } go. { would }
Ask — — — whom — may go.	— whom may — go —	— asked — — — whom — might go —.
Ask — — — whom — can go.	— whom can — go ?	— asked — — — whom — could go —.
Ask — — — whom — — { want } to go. { wants }	— whom { do } — want to go ? (does)	— asked — — — whom — wanted to go —.
Ask — — — whom — wanted to go.	— whom did — want to go ?	— asked — — — whom — wanted to go —.

OTHER FORMS.

Ask — for —.	— asked — for.
Ask — what —.	— asked — what —.
Ask — whose.	— asked — whose —.
Ask — how many.	— asked — how many.
Ask — how much.	— asked — how much.
Ask — how old.	— asked — how old.
Ask — which.	— asked — which.
Ask — what the matter —	— asked — what the matter —.

— TOLD — THAT —.

Tell — that —	(go) (goes)	— told — that — went —.
Tell — that —	(do not) (does not) go.	— told — that — did not go —.
Tell — that —	went.	— told — that — went —.
Tell — that —	did not go —.	— told — that — did not go —.
Tell — that —	(shall) (will) go.	— told — that — (should) (would) go.
Tell — that —	(shall not) (will not) go.	— told — that — (should not) (would not) go.
Tell — that —	may go.	— told — that — might go.
Tell — that —	(can) (cannot) go.	— told — that — (could) (could not) go.
Tell — that —	(want) (wants) to go.	— told — that — wanted to go.
Tell — that —	(do not want) (does not want) to go.	— told — that — did not want to go.
Tell — that —	wanted to go.	— told — that — wanted to go.
Tell — that —	did not want to go.	— told — that — did not want to go.
Tell — that —	(want) (wants) — to go. (wanted)	— told — that — wanted — to go.
Tell — that —	(do not want) (does not want) — to go. (did not want)	— told — that — did not want — to go.
Tell — that —	will let — go.	— told — that — would let — go —.
Tell — that —	will not let — go.	— told — that — would not let — go —.
Tell — that —	went to get —.	— told — that — went to get —.

There is a general rule governing all of the *asked* and *told* constructions, and when this is discovered by the pupil he has taken a great step towards their mastery.

The outline kept upon the large slates where the pupils can refer to it has been found of considerable help. These constructions involve a great variety of language, and the entire second year can easily be spent in developing them. I would begin by saying, in writing or spelling, "Ask Alice if she is cold;" "Tell John not to make a noise;" "Ask Mary if she is going home next Saturday;" "Tell Flora that her dress is very pretty" [see outline column (a)], requiring each request to be properly complied with [see outline column (b)]. I would continue exercises of this character for several weeks—being careful to bring out all the forms in the outline—until a very clear idea of *to ask* and *to tell* is acquired.

I would then require these little conversations to be written out: "Miss S. asked me where I got my new muff, and I told her that my sister sent it to me. She said that I must write and thank her for it." [See outline column (c).]

The sequence of tenses must be carefully observed, and much practice in the use of *all the constructions* must be given.

The conversations that naturally occur in the school-room should be utilized, but they should be supplemented by others planned by the teacher to bring out the forms upon which the class is weakest.

The conversations may be carried on in writing, spelling, signs, or speech, where it can be employed.

It will always be found that the most difficult task is for a pupil to put into correct language what has been said in signs outside of the school-room, hence special drill covering this should be given.

When the child's mind begins to assimilate these new forms they will appear interwoven with other matter in his original composition—in letters, anecdotes of home and school-life, news, etc. As long as mistakes occur upon these constructions, the need for more drill upon them is evident. When once mastered, a complete foundation has been laid for future language work.

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BENSON.—III.

WHILE I was North last summer, some of my acquaintances where kind enough to make inquiries after Benson. Some of their questions led me to believe that I had not been sufficiently clear on certain points. It is, of course, desirable that no erroneous impressions should go abroad with reference to a character of Benson's importance, so I will do what I can to make amends for past offences of omission and commission, beside adding a few more notes on his scholastic career.

One lady was desirous of ascertaining Benson's first name. His first name is Benson. It is easy enough to answer that, and at the same time it affords an opportunity for pointing out one of the good features of a small school. Here we find a personal intimacy between pupil and teacher which is noticeably and unavoidably absent in a large institution; there the first names, especially the commoner ones, become duplicated and reduplicated until it is necessary to employ the last name in order to specify which "John" or "Henry" or "Albert" is meant. But I protest against the custom which obtains in some localities of omitting the first name altogether, and particularly objectionable is this when speaking of the girls.

"Johnson has fallen out of the swing, and Slaughter has gone to call the nurse."

"Bradley got a box from home to-day."

Such expressions may be heard any day in most of our larger schools, and that, too, when reference is had to sweet-faced little ones, who are thus robbed of much of their winsomeness. There is no need for this offence and no excuse for it in a small school. And accordingly, even in the case of Benson, who is no infant and not particularly winsome, the last name is rarely used, and is probably not known to many about the place. The fact is, I am not quite certain what it is myself. I wrote it phonetically as it was pronounced to me (and repronounced, by request, and subsequently pronounced again) by Benson's brother when he first came here, and I then decided to await the arrival of letters from his home ere I could be assured as to the exact orthography. But Benson's father employs an amanuensis, and this official apparently labors under the same difficulty that I do, for I have noted that he rarely spells the name twice the same way.

I find that it is necessary to correct the statement of Benson's age. His brother, on his first visit, said that Benson was sixteen. Taking him "by and large," I felt sure he was nearer twenty. Diligent inquiry has at last elicited the coy admission that he was twenty one last May.

When articulation was introduced into the colored department last fall, Benson regarded the new feature as a great joke. The efforts at speech made by the learners threw him into convulsions of laughter. When it was suggested that he enter the new class, he gave all concerned to understand that he had no time for such frivolity. Being properly urged and his beneficent influence being duly pointed out, he gave a reluctant assent and ambled forward to the recitation chairs. After weeks of trial it became evident that Benson's croaks and chirps could never be moulded into anything remotely resembling speech, and it was accordingly delicately hinted that he could now be dispensed with in that department, but he declined to take the hint. Articulation had become a thing to be desired in his eyes, and he promptly came forward day after day and insisted on being heard. The artful Pick, ever on the alert for Benson's discomfiture, paid special attention to the vocal efforts of the latter, and frequently appealed to the teacher to know whether Benson spoke correctly or not. Evasive replies did not satisfy the young rascal, and he would archly respond, "I know! I know! That not right!" and would then begin to make remarks of a personal character in the sign-language. But Benson, secure in the conviction that Pick could not in the nature of things be absolutely sure that his speech was imperfect, would placidly continue his oratorio undisturbed by the innuendoes of his critic. In his controversies with this juvenile, Benson usually takes refuge in a lofty and ominous style, and an affectation of sublime indifference that does not in the least impress Pick. These failing, he breaks out into vociferous objurgation, which ought to be preserved, but which could only be secured by the aid of a phonograph, for it certainly could be represented by no alphabetical characters known to man. When this stage is reached Pick usually retires, either overawed or more probably from prudential motives. Official notification from the head of the Institute, diplomatically presented, ultimately was instrumental in inducing Benson to give up his oratorical studies, though he begged to call attention to the fact that he had not sought

this position in the first place ; it had been a clear case of the office seeking the man. In fact, he had gone into the thing against his better judgment, and in his opinion he had not been treated with that consideration that was unquestionably his due. But let that pass. Things had gone too far now for arbitration or apology, and hereafter the oral method need expect no further support from him.

Benson's theology is extremely optimistic as regards himself, but he has nothing but the darkest of forebodings for Pick. Sometimes his prognostications of Pick's future are of such a realistic nature that I feel called upon to interfere and suggest a change in the drift of the conversation. He has never distinctly avowed his belief in the doctrine that the king can do no wrong ; possibly he thinks there is no necessity for proving an axiom. Any attempt to foster on him an infraction of the rules is certain to be met with an animadversion on the state of Pick's morals and the degeneracy of mankind at large. Anything at all approximating an admission of shortcoming on his own part apparently never enters his mind. If there is no opportunity of evasion, he placidly asserts his royal prerogative and assures me that it is all right ; he did that himself ; Pick and these other miscreants had nothing to do with it. Of course it was unusual to find that they were not implicated, but as a matter of fact they were not, and hence it was unnecessary to pursue the investigation further.

At the close of last session, while I was one day explaining to the colored pupils in whose charge they would go home, over what road, etc., I was interrupted by a snort of wrath from Benson. Inquiry revealed that Pick had called the attention of the class to the fact that Benson and Henry were to travel together. Henry is a happy-go-lucky individual, some nine or ten years of age, for whom Benson has the most profound contempt. He wears his apparel with an air of unstudied negligence, and in moments of abstraction permits his lower jaw to become detached from the upper to quite an appreciable degree. These things grate upon Benson's sense of propriety, he being something of a dude. I took a picture of the colored pupils in their class-room one day, and Henry, wearying of the delay, sank languidly back in his desk and permitted his chin to droop upon his chest in his accustomed fashion, so that the most conspicuous feature in his countenance was a yawning chasm. When Benson caught sight of this hiatus in the proof

he seemed at a loss for language to express himself, but whenever photography was mentioned after that he always desired to be "taken" separate and apart from the herd. Now, when he found that he was booked for railway travel in company with this same Henry, he took occasion publicly and vociferously to disclaim all connection whatsoever with him; and accordingly, when on the departure of the pupils I went forward to the car reserved for colored passengers, I found that Benson had placed himself as far as possible from the obnoxious Henry, and was gazing out of the window in profound contemplation of the scenery.

A few mornings ago I entered the colored school-room to find Benson in a state of great indignation. Was he supposed to furnish brains for the whole class, or might he be pardoned if he insisted upon being held accountable for one lesson only, and that his own? Being asked to state his grievance in less general terms, he intimated that Jim had been copying from him again. If the thing were of infrequent occurrence, or if Jim were the only one who profited at his expense, it might perhaps be borne, but this daily and drastic drain on his intellectual powers was too great, and he had determined that for once at least they might shift for themselves; he would write no lesson this day. His teacher's explanation differed somewhat from Benson's. For a day or two she had been puzzling over his good lessons; they were too good. Benson, in his thirst for knowledge, had overdone the thing. If he had been more expert, he would have thrown in a few mistakes by way of diversion, if nothing more, but a perfect lesson day after day from that source could not fail to excite suspicion. She finally came to the conclusion that his ostentatious erasure of the writing on his slate needed a little supervision. The supervision was given, the slate was wiped clean, and Benson's morning lesson did not materialize. She was also inclined to the belief that Benson's wrath at Jim was due mainly to the fact that Jim kept his slate carefully concealed from scrutiny and thus destroyed Benson's last hope of securing information on the lesson. Then Benson's ultimatum came. Then I came. I also saw, but I did not emulate Cæsar any further. Indeed, I rather adopted the tactics of Benson, for I studiously turned my attention elsewhere and left the teacher to struggle with the problem alone.

A lady at Lake George, asking about Benson, said, innocently enough:

“He’s a white boy, isn’t he?”

The reader may perhaps be surprised to learn that that artless inquiry has been the source of much comfort to me; it is conclusive evidence that I have not painted Benson as black as he is. However, complexion is only skin deep, and it will do no harm for me to explain in set terms that while his face is not so black that “charcoal will make a white mark on it,” still he can never hope to pass for a blonde.

Benson is never so happy in school-work as when he is permitted to fall back into the chirography of the days when he first came here. It is no unusual thing to find him laboriously copying from the large wall slates some of these weird characters, and woe be to the unlucky juvenile who accidentally or purposely erases them before Benson has transcribed them in ink or plumbago among his private papers. During this period his brow is deeply furrowed with thought, and he will pause at times in profound perplexity over some doubtful passage, as though the fate of nations were trembling in the balance. Pick has learned that on such occasions it is best for him to keep at a respectful distance. I have sometimes endeavored to get a translation of some of these effusions by asking him to spell on his fingers what he has written, but in vain. He gives me to understand, by dark and mysterious signs, that this is a private cipher not designed for publication. This evening while I was writing he came into the office and handed me one of these productions, with the request that I forward it to the man with the long beard (his father, I suppose). He said there was a mistake in one line, and to this extent I agree with him. I had thought of asking to have the letter stereotyped and inserted here, but, owing to this error having crept in, I deem it best not to publish it.

Of his real progress in learning I cannot speak in very enthusiastic terms. Still, when I consider the long weeks that passed before he was able to use a single word intelligently, I am surprised to note the advance he has made. How much he has learned! He can describe many acts correctly. He spells many words and phrases aptly and of his own accord; he can also answer several questions intelligently. How *little* he has learned! No need for me ever to fear discomfiture at the thought that Benson may some day read and understand what I have written of him. No; it is as much of a sealed book to him as his “cipher” is to me. Yet the thought is not solely

one for self-gratulation. Have I been altogether fair to Benson? He is thoroughly loyal to me. His great strength is ever at my service and is cheerfully exerted whenever he is called upon. When I think how proud he is of the slightest word of approval from me, I feel a little uncomfortable to think of what I have said behind his back. Has not even an obscure, ignorant, "defective" negro boy some rights that deserve to be respected? I believe he has, and I will transgress no more.

WM. A. CALDWELL, M. A.,
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A CASE OF RECOVERY OF HEARING.

AMONG the causes leading to the withdrawal of pupils from schools for the deaf that of recovery of hearing is, perhaps, the rarest, and certainly one which principals are least likely to object to. The subject of this paper was one of my own pupils last year, and now attends a public school for the hearing in this city, as he did before he became deaf. The following statement by the family physician was written just after the boy had recovered from an attack of the same disease from which he lost his hearing sufficiently to enable him to resume his studies, and was a reply to the usual questions as to cause of deafness, consanguinity of parents, etc. The statement gives more information than was called for at the time, but is especially valuable in the preparation of this paper. The physician who makes the statement is Louis Bauer, M. D., M. R. C. S., England, Professor of Surgery in the St. Louis College of Physicians and Surgeons:

Max Fuerbringer is a boy of 11 years and 8 months, who was successively attacked by peripheral neuritis (vaso-motor Raynaud disease), and who eventually lost his sense of hearing, apparently from the same cause. (1) The subject of this report—namely, Max Fuerbringer—is personally known to me since his birth. (2) I am likewise acquainted with his parentage and with his remote ancestry on his mother's side. (3) To my certain knowledge, there is no consanguinity in his direct or indirect ancestry. (4) He has two sisters and one brother. (5) None of his family is afflicted with deafness. (6) But his father committed suicide under circumstances indicative of melancholy and some derangement of the mind. (7) The older sister of the patient, although strong, active, and clever in acquiring knowledge at school, improving rapidly by musical instruction and very adroit in the business of her mother, has been subject to epileptic paroxysms in long intermissions. The last at-

tack took place in the beginning of the present month (May, 1891). (8) Until the commencement of his recent affliction I have considered Max Fuerbringer a healthy, active, and vigorous boy; generally docile, and of good application to learn and improve himself. (9) Max F. was about eleven years old when, without premonition or apparent provocation, he was suddenly attacked by a most painful affection of the fore part of one foot. (10) I saw him the very day when he was taken sick. (11) There was no swelling of the foot; no discoloration; no increase of temperature or change of contour. But the sensitiveness was so intense to the lightest touch that at one time I suspected exaggeration, and even simulation. (12) While the local symptoms seemed to be so very severe, his system was perfectly free from incursion. The tongue was even free from coating, although his appetite was certainly diminished. (13) His sleep was interrupted by the slightest touch of his foot by bed-clothes. (14) After careful study and analysis of the symptoms and conditions presented, I settled the diagnosis as *peripheral* neuritis of the vaso-motor nerves (Raynaud's disease), and treated it accordingly. (15) Already at that period the patient evinced considerable irritability of temper without adequate provocation, and was difficult to restrain. (16) The first spell of his sickness lasted about three weeks, when it suddenly subsided, enabling him to lay aside his crutches, return to school, and join in the sports of his play-fellows. (17) The relief was, however, of but short duration. A similar attack befell the other foot, exhibiting the same symptoms and disappearing in like manner. (18) The next invasion of the same nature was at the neck. (19) Then followed an alternation from one of the affected localities to the other. (20) About six months ago the patient *suddenly* and so *completely* lost the sense of hearing of both ears that the strongest sound made no impression upon him whatsoever. (21) I have noticed no change since in the degree of his deafness. (22) I do believe that, even in this affliction, neuritis of the auditory nerves lies at the bottom, for there is no pain, nor any evidence of physical derangement of the auditory apparatus. (23) Since his deafness set in he has twice had attacks of neuritis in one foot, without any modification of the former. He is just recovering from the last attack. (24) His mental excitability is at times strongly marked and rises occasionally to a furious paroxysm, in which nothing can restrain him. He seems *then* not to know himself, but remembers and repents it after the fit is over. (25) At ordinary periods he occupies his leisure hours very usefully; he seems to realize his unpropitious future and tries to acquire some profitable occupation. (26) His general health appears to be undisturbed; he enjoys good appetite, sleeps well, and has regular passages of the bowels.

The following extract is taken from the *St. Louis Clinique* of August, 1891, and is Dr. Bauer's account of the boy's recovery of hearing:

A Sudden Return of Hearing after Complete Deafness of over thirteen months.—The readers of the *Clinique* will doubtless remember that on two occasions in the past I detailed a striking case of Raynaud's disease

under my charge. The neuritic attacks affected alternately the anterior parts of the feet, and only once involved the left side of the neck. Soon after this attack, the patient, a boy then about eleven years old, lost his hearing, and remained *absolutely deaf* until the 19th of this month (July, 1891).

When at the School for the Deaf and Dumb of our city, he was calm, docile, assiduous in learning, and well liked by his instructors. When at home, he occupied his time in painting and drawing. Occasionally he would join in the work of a decorator of crockery, and made surprising progress in the art. On different occasions he exhibited spells of mental excitation bordering on mania, and threatened members of the family with such weapons as lay within his reach. While suffering from the last of these attacks he attempted to shoot a colored man whom he unjustly suspected of an offence. Missing him, however, he wounded a little boy who happened to stand in the line of his aim. Although the pistol was a mere toy and could not seriously injure any one, this incident clearly showed that the patient was incapable of controlling his insane excitation, nor could he be restrained by others. Under these circumstances it became the duty of his mother to place him under the protection of the city institution for the insane. While there he became very docile, and occupied himself calmly with the same work as he had done at home. It was the intention of the relatives not to leave the patient at the asylum, but to transfer him at the earliest opportunity to the care of suitable persons in the country. In furtherance of this plan he was soon withdrawn from the institution and given in charge of a gentleman in Carondelet [a suburb south of St. Louis], for both safe-keeping and instruction. Here it was that the first but rapid sign of hearing showed itself in the perception of one shrill whistle of a steam-engine. This was on the 14th of July. When he arose, five days later, he could discriminate between the noise of a moving electric street-car and every other sound, moderated at once his own loud voice, and displayed an intense delight at the sudden recovery of so important a sense.

All the attacks of Raynaud's disease had set in suddenly. With the same abruptness he had become deaf in both ears. I inferred, therefore, that the deafness was but a phase of the same malady, and on that supposition I had based the rather sanguine hope of eventual and sudden recovery. Whether the present relief will be permanent, or whether the affliction will return, as the others had repeatedly done, to the same localities, is a question which future observation of the case alone can answer.

There can, however, be no doubt that Raynaud's disease pertains mainly to the vaso-motor peripheral nerves. The excessive hyperæsthesia in this case and the symmetrical gangrene in others admit of no other explanation. * * *

The sudden recovery of my case is the work of nature and not of medical art. All my efforts have been limited to general supervision of appropriate diet and functional order, for the best-informed colleagues on diseases of the nervous system and the best literary sources on the subject left me without even a suggestion as to appropriate treatment. Having, therefore, no rational basis of therapeutic procedure, I limited my

treatment to general hygienic measures. That no special local measures were admissible in a case where the auditory nerves were alone involved seems to be self evident.

The following extract is taken from a letter written to me by the boy's aunt, who resides with the family, and explains itself :

The return of his hearing is a most strange and remarkable case. During the summer we had a great deal of trouble with the boy. His irritability and passions rose to such a height that he became unmanageable, and even dangerous to his family as well as to the neighborhood, and his mother was compelled to place him in an asylum. While there, although his stay was limited to only a few days, a complete change came over the child mentally. Whether it was the confinement alone or the unhappiness he felt to be among the insane and the fear of being kept there that worked the miracle I am not able to say, but the fact remains that he came out of the institution a different child and has given us no trouble since. After a short stay with friends in Carondelet he came home, and a few days afterwards had again an attack of neuritis at the left side of his neck so that he was not able to move his head. The next morning his hearing suddenly returned, and with it the pain and the stiffness in his neck ceased and he was well in every respect. That we are all very happy and thankful for this remarkable recovery you can well imagine ; it is a blessing that we had given up all hope to have bestowed upon us again.

The boy recently visited our school, and of course was the envy of his former school-mates. His ability to hear was tested by several teachers of the Jefferson Branch, of which our school is a part, and by myself, and all agreed that it was perfectly normal. In reply to the question as to "how it happened," he said that it was because he had been a good boy.

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St. Louis, Mo.

HOW THE DEAF CONVERSE WITH EACH OTHER IN NORWAY.

IN all countries and at all periods the language used by the deaf in their mutual intercourse has been subject to changes, both on account of the differences and improvements in methods of instruction and in consequence of the growing attainments of the deaf.

It would be an interesting task to write an essay showing the development of the history of this language in the several countries, especially those taking the lead in the civilization of mankind. Such a paper undoubtedly would be useful to all concerned in the education of the deaf. Many prejudices could be dispelled and many misconceptions corrected.

I am, however, not capable of supplying complete information concerning the progress of the language of the deaf in my own country, much less in other countries, and I am consequently obliged to limit my remarks to the present state of this language in Norway and its development in the period lying within the circle of my own experience.

There can be no doubt that the language of the Norwegian deaf has formed itself differently from that of the deaf in most other countries on account of the peculiar position occupied by the methods of instruction in the Norwegian schools. The difference becomes very striking when our deaf language is compared to that of the neighboring kingdoms of Sweden and Denmark. Personally, I am inclined to believe that it marks an advanced stage of progress and lies nearer to the language of the future than any other, but the correctness of this opinion can, of course, only be ascertained by due comparison between all the different forms of language existing, and such a comparison cannot be made until intelligent deaf persons and their teachers from all countries explain the merits and defects of the languages employed in their respective lands.

The progress of the instruction of the deaf in Norway has been peculiar. The first institution was founded in 1825 at Trondhjem, in a district which lies, geographically, not far from the centre of the kingdom, but, in regard to the population, at the northern extremity. This institution worked with an average of fifty to sixty pupils, who were all educated by the French sign method until 1848. In that year and in 1850

there were founded three new schools, one at Christiania, one at Christiansand, and one at Bergen, all using the German oral method, which, at that time, was not wholly "pure" either in the mother country or anywhere else. The manual alphabet certainly was banished, and all the pupils, without exception, were instructed by speech. But, more or less, natural signs were not only tolerated, but were used by the teachers, as they said, in order to promote the understanding of the pupils and facilitate lip-reading.* The three new schools worked with a total number of about two hundred pupils, while the Trondhjem school continued to instruct fifty or sixty, nearly all from the northern parts of the country. As graduates from the Trondhjem school were to be found only in a very small number in the populous centres, the instruction of the new oral schools laid the foundation of the language now used by the deaf in this country in their intercourse between themselves.

The method used by the oral schools remained, on the whole, unaltered during a period of thirty years, although it was unmistakable that the teachers strove to restrict the use of signs. In 1881 and 1882 the pure oral method, which was first used by Mr. Arnold in his school at Riehen, near Basle, and with great success, was introduced in all Norwegian schools except the old institution at Trondhjem.

But this change is, as will be seen, of a recent date, and has not yet influenced the language of the deaf.

The course of instruction in the early part of this period had a duration of four or five years; sometimes less, seldom more. As a natural consequence, signs formed the chief part of the mutual language of the first graduates. The signs were, so to speak, completed or explained by spoken words, formed by movements of the lips and the tongue, but voiceless. As all the graduates could read from the lips, many "semi-mutes" even then used principally the spoken word and employed signs only as illustrative accessories. When a graduate of the Trondhjem school was present in the company, as was not often the case, the conversation with him went more slowly,

* I must beg American and English readers not to confound this not pure oral method with any of the so-called "combined" methods. Speech was the base of all instruction, and the signs never were used instead of speech, but were only allowed as simultaneous additions to spoken words.

because his elaborate signs were not all familiar to the other deaf, and because the manual alphabet, which must take the place of spoken words in the case of names or other more difficult words, could only be used in a slow and awkward manner by the orally-taught deaf.

During the forty years that have elapsed since the establishment of oral schools great progress has been made in the education of the pupils. As early as about 1870 the course of instruction was prolonged to six or seven, often eight years, and the pupils graduated from the schools therefore possess a greater mastery of language than their predecessors.*

The consequence of the improvements has been that speech is constantly gaining ground. The spoken word now can be said to be the real basis of the language of the average deaf. Signs are chiefly used as a means of facilitating lip-reading, and they have lost much of their elaborateness and completeness. They are often simple movements of the hands, which cannot be understood if not combined with movements of the lips. Many signs are so abridged that they can mean several things. Thus the sign for "man" can also mean "father," and the pronoun "*man*" corresponding to the French "*on*." There is only a single sign for "woman," "wife," "mother," and "maiden." The difference of meaning must be ascertained by watching the lips of the speaker. The elder of us in many cases know how to express the difference by signs only, but it does not answer the purpose so well, as the movements of the lips are much swifter and easier.

The deaf speech of mutual intercourse is still in most cases voiceless. But some of the deaf graduated under the old *régime* (mostly semi-mutes), and generally the graduates of the oral schools in which the pure method was employed from the beginning, use the voice even in the company of each other.

The language of the deaf being thus spoken words accompanied with signs, it is possible to deliver an address or lecture to large "audiences" of deaf persons, pronouncing it *verbatim* in the same way as in the presence of a hearing audience. When the speaker reads to the intelligent deaf only, he will be able to recite the tale of an eminent author in a time not much exceeding that required to read it to a normal audience, only using a few plain signs now and then. Are the deaf present

* In conformity with an act of 1881 introducing compulsory education from July 1, 1883, the school course now is uniformly eight years.

in possession of a very unequal mastery of language and culture of mind, the lecturer must speak more slowly and use more signs. But even then he will deliver his lecture in a much shorter time than if the manual alphabet were made use of. When the sentences of the author lie above the comprehension of the "hearers," they can be explained without departing from the grammar of the language used by the people of the country.

It must be added that nowhere in Norway are there, nor have there been, any very large gatherings of adult deaf. In Christiania, with its 150,000 inhabitants, there are only to be found about 110 such persons. Large institutions, as in the United States, are as yet unknown here.

Our experience in Norway shows that the language of signs is certainly very much favored by the deaf and facilitates their conversation between themselves, but that it is not indispensable and inevitable as the basis of the language of the deaf, as often is believed in countries where signs form, or until recently have formed, the means of instruction, and therefore continue to be the only means of conversation between the deaf.

I believe that, after all, the oral method, or the speech of the deaf, has no dangerous rival in the manual alphabet. The real rival is the sign-language. But, on the other hand, while the non-teaching of speech makes the language of signs unavoidable, the teaching of speech will make signs the servants, and by degrees deferential ones too, and not the masters of the language of the deaf.

The principal of the school for the deaf at Hamar, some seventy miles north of Christiania, has had the opportunity of ascertaining how a deaf person who never had seen and never will be able to see other people employing signs, and who is unacquainted with the manual alphabet, learns and makes use of language. In January, 1888, he received a deaf and blind girl, fourteen years of age, who was perfectly dumb and had no trace of hearing or sight. This girl, Ragnhild Kaata, was taught by the pure oral method. She had invented some simple signs in order to make known her wants to those about her. But when spoken words were given her she made no attempt to combine them with signs. When she wishes to say anything to her teachers or playmates she uses speech alone. When the words at her command do not suffice, she strives

through a minute mimical description of the thing, the action or the state,—about such a description as you or I would employ in speaking to a Chinese or a Russian,—to explain to the person spoken to that she wants the word for the described matter. The fellow-pupils never attempt to use signs when speaking to her, well knowing that this way of communicating is too troublesome and tedious when the person spoken to is blind. When she does not understand by touching the lips, they write in her hands.

Unlike the American deaf and blind children who are now, following her example, learning speech, Ragnhild never has been made acquainted with the manual alphabet. If her instructor would teach her this means of conversing, she certainly would not employ it herself as a regular way of addressing others, as it requires more time than speech, but very likely she would ask a person, the movement of whose lips she fails to understand, to spell the words on his fingers; she no doubt would be quick to discover that the manual alphabet is swifter than writing. But the manual alphabet is little known in Norway; even amongst the deaf many are unacquainted with it and very few can use it with ease. Consequently, it will not prove of practical value to teach her the alphabet, especially as a combination of speech and the manual alphabet does not afford very much saving of time compared to a combination of speech and writing.*

While signs are out of the question where the sight is wanting, the seeing deaf always are inclined to express their thoughts by signs, and they can do so in most cases, except when the delicacy or subtlety of the idea requires a more precise and detailed form of language. But the great defect of the sign-language, as admitted by all, is that its grammar is different from that of any other language used by mankind. The deaf taught by signs or the manual alphabet, therefore, are like people who are every day obliged to speak with two different tongues. Perhaps a few gifted deaf are capable of mastering both languages alike. But are the large majority? Speech and lip-reading can, I believe, pave the way to a dif-

* For particulars relating to the instruction of Ragnhild Kaata, I refer to the Boston periodical, the *Mentor*, April, 1891. The fact that the oral method was employed in teaching her was first mentioned in the *Deaf-Mutes' Journal*, New York, in 1888. See also the *Annals*, vol. xxxv, pp. 217-219.

ferent state of things. Without depriving the deaf of the use of signs, it by degrees substitutes the grammar of spoken words for that of the sign-language.

But there can be no doubt that the transition of the language of the deaf from signs to speech will be much retarded in places where there are large gatherings of the deaf using signs only. The small minority must speak as the large majority do. There lies, in a nutshell, the chief cause of the opposition on the part of the deaf to the oral method.

LARS A. HAVSTAD, M. A.,
Christiania, Norway.

LETTERS TO A BEGINNER.—I.

MY DEAR A.: You have been very often in my thoughts of late, since I heard that you had begun the work of teaching the deaf, and I propose to make you the recipient of some advice. Pardon me for saying that, for the first year or two of your connection with this department of pedagogics, your utility will consist chiefly in the use that I am about to put you to, so that I trust you will peruse what I indite with becoming humility, and endeavor to derive both pleasure and profit from the task.

I assume that in entering upon this work you have been actuated by one of two motives: you either propose making it your life-work, or design to use it as a stepping-stone to something higher. I will not at present discuss the question as to whether it is possible to find anything higher, but will accept your view of the matter, for it certainly must be your view if you simply intend to make a convenience of this occupation until such time as it suits your convenience to leave it. I shall have occasion at times to regard you as in one of these positions and sometimes in the other. I may as well, also, confess to you that I am a little given to romancing in my more serious moods, so when you find me expressing indignation against some noted but nameless member of our profession, you need not immediately begin to conjecture who is meant, and apply my criticism to this or that person of your acquaintance, for it may be that I have simply set up a man of straw for a little tilt when I may feel sure that I can down my opponent. In these days almost anything is liable to find its way into print (I saw something last week in the papers with your name

tached. No doubt the time will come when you will regard these rhymes with less complacency than you do now.) But, as I was saying, there is danger of being "interviewed," and then regretting that you ever said certain things publicly. There is danger of posthumous publication of private correspondence. So, for fear of any mishap of this character befalling me, I think it advisable to adopt a *nom de plume* in this series of letters. You will have no difficulty in recognizing me under the thin disguise, and even if you do not it is no great matter, as I am principally concerned in your receiving and digesting the admonitions and suggestions that it is my intention now to visit upon you.

One of the first things to perplex you will be the great diversity of opinion with reference to methods. Every teacher has some particular theory, and you will doubtless be much puzzled to find how much liberty is allowed in this particular in most, if not all, of the schools for the deaf. In the same institution you will find the advocates of methodical signs, natural signs, and no signs at all. You will also find that these various advocates will, on occasion, defend their pet ideas against all comers with considerable vigor. You will, in all probability, be taken at once with the notion of reforming the customary order of signs. No amount of explanation will have any effect on you for a time. But you will recover in the course of a year, or possibly less time. Like the afflictions of childhood, this is something that has to be "taken;" but you will recover, or if you don't you will be as dead a sign-maker as—well, you will be as dead every way as a boy who never gets over the whooping-cough. But never mind me; go on and catch it, and get over it as soon as you can. Let me beg of you, however, not to waste any time in attempting to make converts.

This liberty of doctrine and practice that prevails in our institutions is a commendable feature in my opinion. In recommending a lady for a position in one of our Western schools, I mentioned her plan of work. The principal in his reply said that he cared little for methods; he was chiefly concerned in *results*. My dear A., let me advise you to skirmish for results with all the power of your mental and physical being. It is of no consequence whether you are in this work permanently or temporarily. I do you the honor to suppose that you wish to accomplish something; you do not wish your pupils to pass

through your room and beyond your influence without at least having impressed them with the conviction that you were much in earnest. If I am mistaken in this surmise, I have one more suggestion to make: Go to that mill-pond back of your father's house and immerse yourself in it. Get down close to the bottom and remain there. That is your proper sphere. In order to obtain results it is necessary that a teacher be disentangled from all red tape and other restrictions so far as is practicable, and, as I say, this is generally the case in our schools to a greater extent than in hearing public schools.

This same liberty (laxity, you will doubtless term it) extends to the pupils. There is a personal directness, an absence of circumlocution or finesse in their remarks, that will be sufficiently refreshing to take your breath away at times. When one of your class seriously accuses you of having stolen his slate pencil, and frankly tells the others that you have lied when you vigorously deny the soft impeachment of theft, do not get excited and resort to extreme measures. Retire to the corner of the room, take this letter from your pocket, and, with the light falling properly over your left shoulder, read the following bit of philosophy: All statements made by man are either true or not true. All business transactions are conducted openly between the two traders, or otherwise there is some underhand work somewhere. These broad principles are recognized by your pupils. If you have absent-mindedly appropriated John's pencil without his noticing the fact at the time, he simply states that fact when later on he sees you flourishing that article with an air of proprietorship. Your denial of the charge is a plain challenge of his visual powers; you have manifestly lied, for there is the pencil in your hand. His plain language must, of course, be corrected. He must be educated up to a civilized appreciation of the wide difference between embezzlement and stealing, kleptomania and thieving, but do not attempt to work reform by an external application. True reform must work from within. Devote your time to winning the confidence and the love of your pupils, and they will try to please you. Your objection to being called a liar and a thief may be inexplicable to them, and they may be at a loss for titles to substitute for these very useful ones, but if they regard you as they should they will leave you nameless rather than give offence.

I have dwelt somewhat at length on this point, for I feel that

I started wrong myself, and I am anxious that you should be admonished betimes. I strode into the study-room, my first night of supervision, with a chip on my shoulder, and I wore it for many a weary session before I learned wisdom from bitter experience. My impression then was, that my chief task on such occasions was to maintain my dignity. When I occasionally read now in the papers of the Dignity of Labor, I reflect what a profound discourse might be written on the Labor of Dignity. It is hard work, my esteemed friend; hard work and poor pay. Do not enter the school-room with the idea that you are the most important person there. You are simply a part of the furniture. You are, or ought to be, the most important piece of bric-a-brac in there of course, but you are only of secondary consequence after all. The room was not built for you, and don't you forget it. Some of our fellow-laborers labor under this delusion all their lives, and are continually in hot water because of their inability to inspire a similar fancy in the minds of their pupils. Do you chiefly concern yourself with arousing in your class a desire to know more, and you will find that it is infectious; you will want to know more yourself; indeed, you will *have* to know more if you want to keep pace with a class of that kind.

For a tail-piece to this rambling epistle, I will just tack on this proposition for you to ruminate upon until I address you again. Wherever there is a disposition on the part of a class (of deaf children) to resist the authority of their teacher, in nine cases out of ten the teacher is the one at fault.

POMPANO.

THE NEW DEPARTURE AT KENDALL GREEN.

I HAVE been asked by the editor of the *Annals*, and others, to say something about the new departure in the National College, and though I should prefer to let the work speak for itself, it is due to the profession, and to friends of the deaf in general, that some account should be given of what we are trying to do.

The departure is of a twofold nature. It embraces: 1st, an extension of the college course of study, to include instruction and practice in speech and speech-reading; and, 2d, the introduction into the college life, in intimate association with deaf

undergraduates, of a small number of highly recommended and carefully selected hearing students for a postgraduate course of study and training of one year, preliminary to becoming teachers in schools for the deaf.

Both phases of this departure originated with President Gallaudet, who has had the matter of establishing these new departments under consideration for many years. The plan, however, of relating two diverse ends, the one to the other, in a feasible manner, for the advancement of both, did not occur to him until about two years ago. Some months later, an appeal was made by him to Congress for assistance in the undertaking. An addition to the usual appropriation for the institution was obtained, specifically for the expense of instructors in articulation. This assistance, with other funds in the hands of the directors of the institution, made it possible to open both departments upon an economical basis, and the venture was made accordingly at the opening of the college year in September, 1891.

The first phase presents certain new and interesting features which may be treated in a future paper. It is sufficient to say, at present, that the College is faithfully carrying out the recommendation of the California Convention in letter and spirit. Every student in the College has been assigned to classes in articulation and speech-reading, the work has been prosecuted with intelligence and energy, and in general the results have been gratifying. In a few cases, which had been absolutely neglected or abandoned as unpromising subjects in the schools from which they came, the degree of success has been unexpected and phenomenal.

It is of the second phase of the departure I wish particularly to speak.

The need of preliminary and special training for teachers of the deaf has been too long and too universally recognized to call for an array of proof at this late day. Upon this point the discussion is closed and the verdict has been rendered.

Just how to meet this want is quite another question. At any time within the last twenty-five years, almost any one in the profession, or, for that matter, outside of it, could, upon an hour's notice, draw up on paper a scheme for training teachers, or, with equal facility, demolish his neighbor's plan.

This has been a burning question in Europe, where a single method of instruction is largely prevalent. It will be remem-

bered that no less than nine papers on this subject were presented at the Brussels International Convention by leading representative men of half a dozen nationalities, and, after long and acrimonious debate, the subject was laid upon the table as the only means of putting an end to turbulent sessions and of preventing the complete disruption of the Convention.

This difficult phase of the question is by no means new in America. The subject was discussed at the Philadelphia Conference of Principals in 1876, but no action was taken. The very large convention of articulation teachers held in New York in 1884 took formal action in a series of resolutions upon the subject, and appointed a committee to devise means for carrying the will of the Convention into effect, but this committee has presented no report.

Although consensus of opinion as to the best method of conducting the preliminary special education of teachers is not attainable, training-schools have been in successful operation on the continent and in England for many years. The majority of the live teachers in England to-day hold certificates from such schools or from an examining "college."

Very little has been attempted heretofore in America in the line of preliminary training, and no detailed account of such work has been given to the profession.

The small number of hearing persons ordinarily entering the ranks of the profession each year makes a large normal school with formidable machinery both unnecessary and impracticable. The same fact, together with the exalted nature of the calling, renders it doubly imperative that the greatest possible care should be exercised in the selection of candidates, some of whom at least should be persons of liberal education. This vital point is a matter of personal interest to every worthy member of the profession. No plan for attaining it has ever appeared in print. The plan adopted by President Gallaudet insures the selection of candidates not merely armed with the *sine qua non* of a diploma, but certified by their instructors to have superior qualifications, and further recommended by heads of schools for the deaf as possessing special fitness for the work.

The question of the training of deaf teachers is not here in issue. The College is now, and always has been, a school for training them, and their qualifications are usually well known to many in the profession who have known their antecedents from the days of their childhood.

In this connection I wish to call attention to President Gallaudet's views, as expressed in the closing paragraphs of the Report of his Tour of Examination of Schools in Europe, found in the Tenth Report of the Columbia Institution. President Gallaudet says:

In our own country the difficulty of procuring skilled workers in our peculiar field of labor has been felt in many institutions, and I conceive that one of the most important results of our College enterprise will be the furnishing of young men well fitted to teach the deaf and dumb.

But all teachers in our institutions cannot be deaf-mutes, and I would commend to your serious consideration the desirableness of making arrangements for the reception of hearing young men and women into our institution, who may wish to fit themselves for deaf-mute instruction.

I have met, in my European journey, more than one who desires to enter our institution with a view of acquiring the American method of teaching the deaf and dumb. Several applications have been received, during my absence, from persons in our own country anxious to learn our art, and I am confident great good would flow from the opening of our doors in these and similar cases.

Although President Gallaudet thus explicitly recommended a normal department for hearing young men and women twenty-five years ago, and has never abandoned the plan as above proposed, the way was not open for carrying it into effect until last fall.

On the 21st of September last, a class, consisting of six young men, graduates of as many colleges and universities, and one young woman, a graduate of the Boston High School, with previous experience as a teacher of deaf children, entered upon a year's work of special study and training.

For six weeks, one hour per day, and for the remainder of the first term, three hours per week, were devoted to the study of the mechanism of speech and the mastery of Professor A. Melville Bell's Visible Speech, under the instruction of Miss Mary T. G. Gordon, an accomplished teacher of articulation.

At the same time, the class, divided into four sections, or classes of observation, visited daily, for nearly two months, classes of beginners in speech and speech-reading under the instruction of Miss Kate H. Fish, a teacher of experience, whose practice is based largely upon the German method.

The observation classes took notes daily upon the progress of certain pupils, and these notes were submitted to me weekly. These records are filed for preservation. It may be noted here that the observation classes insensibly glided into "practice-classes," and that every member of the class has, for some

months, been charged with the responsibility of training at least one pupil who is practically a beginner in speech and speech-reading, and several others who are not beginners.

Early in the term, Arnold's Teacher's Manual was placed in the hands of the class with special reference to the study of the anatomy and physiology of the organs of speech, and, in November, a valuable course of lectures was delivered before the class by Professor A. Hewson, M. D., the anatomist. Dr. Hewson's lectures were illustrated by anatomical preparations and a copious use of material from Jefferson Medical College, Philadelphia. The class also had the advantage of a practical course in laryngoscopy under the guidance of W. K. Butler, M. D., a specialist of high standing.

We have been peculiarly fortunate in securing for the class a course of practical lectures on Visible Speech by Professor Alexander Melville Bell, the distinguished author and inventor of the phonetic alphabet, symbolic of the organic positions for the elements of speech. Although Professor Bell has retired from the field of active teaching, he made an exception in favor of our class. He has given the major part of a valuable course of lectures. Though the course has been interrupted by inclement weather and the Professor's illness, the class has acquired a working knowledge of the system of Visible Speech as applied to the instruction of the deaf.

Through the courtesy of Mr. W. B. Powell, superintendent of schools for the District of Columbia, the class was permitted to attend a number of lectures on phonetics and pronunciation by Professor E. B. Warman, of Boston and of Chicago.

Professor Samuel Porter gave a course of fourteen lectures in October on sound and the sounds of speech, and these were followed by twelve lectures on pedagogics by Professor J. W. Chickering.

President Gallaudet has given lectures on the profession of teaching the deaf, on the language of signs, and on "values in the education of the deaf."

My own lectures have been of an informal character. I may name, however: The condition of the uninstructed deaf; Early attempts at instruction; Notable deaf-mutes before the founding of schools for the deaf; The art of finger-spelling; The art of speech-reading; to which may be added a translation of a portion of the Abbe Tarra's work on the pure, perceptive oral method, and comments on the history of deaf-mute instruction.

from actions and objects without recourse to signs ; the “ toy-method ” and “ picture teaching ” are also here employed. In another class, language is taught mainly in its written form, and explained by means of language.

Without multiplying details, it may be said that the above outline, together with daily practice in teaching, especially in teaching articulation, embraces the main features of what has been attempted in the one year's course.

It may be said that the effort on the part of the authorities of the Columbia Institution to afford the facilities above described has had the hearty approval of men and women who have been identified with the best interests of the profession for years, and that the members of the class bid fair to become useful members of the profession which they have been invited to enter. Their services are in demand. Correspondence has been opened by heads of schools looking to the employment of all the members of the class, and, in some cases, engagements have been made already for the ensuing year.

Wherever they may go, I bespeak for them a cordial and generous welcome in that spirit of friendship which makes comrades of us all and adds a charm to the profession which we love.

J. C. GORDON, M. A.,
Professor in the National College,
Washington, D. C.

HOW HELEN KELLER ACQUIRED LANGUAGE.*

IN March, 1887, I first became Helen's teacher, and began my work by putting her in possession of the use of the manual alphabet as rapidly as possible. Using any object that she could readily examine by the sense of touch, I would slowly spell its name with my fingers, while she held my hand and felt its motion ; then I would aid her to repeat the word with her own fingers. She easily comprehended what I desired her to do, imitated the movements with careful precision, and seemed to understand that she was learning the names of the objects around her. In a few days she had mastered this entire alpha-

* From advance sheets of the second edition of “ Helen Keller—Souvenir of the First Summer Meeting of the American Association to Promote the Teaching of Speech to the Deaf,” soon to be published by the Volta Bureau.

bet, and could spell the names of numerous objects. Next I taught her words represented by action; she readily caught their meaning, and we were then enabled to form sentences. "Helen is in wardrobe," "Box is on table," "Mildred is in crib," are specimens of sentences constructed by Helen in the month of April, 1887.

In these exercises, and in all my work with her previous to this time, I had followed the method adopted in teaching Laura Bridgman; but I found it was not sufficient for the needs of my little pupil. It became evident to me that it was not wise to confine myself strictly to the use of words of which she knew the full meaning, and I began to give her many words in my sentences without any further explanation concerning them than was conveyed to her by their connection with those words which she did know. I observed that she adopted their use, often without inquiry. After this I invariably gave her complete sentences in communicating with her, often long ones, using many words of which she did not understand the meaning, but in connection with others of which she had full knowledge, and in such manner that she was able to comprehend the meaning I desired to convey. She thus became familiar with, and in the daily use of, many words the full meaning of which had not been explained to her in detail; and, before I realized the importance to her of this practice, she was the possessor of a vocabulary which astonished me.

She learned with perfect ease the forms of the raised letters such as are used in printing books for the use of the blind, and we soon began to form sentences from words printed on separate slips of paper in raised letters; this exercise delighted her very much, and prepared the way for the writing lessons. It was not difficult for her to understand and make use of written language. On July 12, 1887, she wrote, without assistance, a correctly-spelled and legible letter to one of her cousins; this was a little more than a month after her first lesson in chirography. She now uses the "point," or what is termed the "Braille," system of writing; this she can read with her fingers. When writing for those who do not understand reading the point letters, she copies her work into the square writing in which some of her communications have appeared.

I am constantly asked, by persons familiar with teaching the deaf, how it is that Helen has acquired such a comprehensive command of language in so short a time. I think it is,

first, because she has, like many hearing persons, a natural aptitude for comprehending and making use of language as soon as it is acquired; and, second, because volumes of words have been placed in her possession by means of conversation, reading to her from books, and from her own constant use of books printed in raised letters. I have had no particular method of teaching, but have always regarded my pupil as a study, whose own spontaneous impulses must be my surest guide. I have never taught Helen to use signs such as have been employed in teaching the deaf, but confined myself to the use of the manual alphabet in communicating with her. I have always talked to her as I would to a seeing and hearing child, and have insisted that others should do the same. When a person asks me if she will understand this or that word, I reply, "Never mind whether she understands each separate word in a sentence: she will guess the meaning of the new words from their connection with others which are already intelligible to her." I am asked, "How did you teach her words expressive of intellectual and moral qualities?" It is difficult to tell just how she came to understand the meaning of abstract ideas, but I believe it was more through association and repetition than through any explanation of mine. This is especially true of her earlier lessons, when her knowledge of language was so slight as to make explanation well-nigh impossible. I have always made it a practice to use the words descriptive of emotions, of intellectual or moral qualities and actions, in connection with the circumstance which required their use. I began to use such words as "perhaps," "suppose," "expect," etc., when I thought she could understand their application. She was always anxious to learn the names of people we met in the horse-cars or elsewhere, where they were going, what they were to do, etc. The following illustrates her interest in those about her, and shows how these words were taught:

HELEN. What is little boy's name?

TEACHER. I do not know; he is a little strange boy; *perhaps* his name is Jack.

HELEN. Where is he going?

TEACHER. He *may* be going to the common to have fun with other boys.

HELEN. What will he play?

TEACHER. I *suppose* he will play ball.

HELEN. What are boys doing now?

TEACHER. *Perhaps* they are expecting Jack, and are waiting for him.

After the words became familiar to her she began to use them in composition. The following is an extract from a composition written by Helen in September, 1888:

This morning teacher and I sat by the window, and we saw a little boy walking on the sidewalk. * * * I do not know how old he was, but *think* he *may have been* six years old. I do not know where he was going, because he was a little strange boy; but *perhaps* his mother sent him to a store to buy something for dinner. He had a bag in one hand. I *suppose* he was going to take it to his mother.

Her command of language has grown with her increase of experiences: while these were few and elementary, her vocabulary was more limited; as she learns more of the world about her, her judgment acquires accuracy, her reasoning powers become stronger, more active, and subtle, and the language by which she expresses this intellectual activity gains in fluency and logic.

I am convinced that the freedom and accuracy which characterize Helen's use of English are due quite as much to her familiarity with books as to her natural aptitude for learning language. I gave her books printed in raised letters long before she could read them, and she would amuse herself for hours each day in carefully passing her fingers over the words, searching for such as she knew, and would scream with delight whenever she found one. Many times she would inquire the meaning of some word she had not previously felt, and, having learned it, would go on with great eagerness to find its counterpart on other pages; she thus naturally became interested in the subject of which the words treated, and as books were placed in her hands suited to her age, she was soon reading simple stories. In selecting books for Helen to read, it has never occurred to me to choose them with reference to her misfortune. I have read to her such publications as other children of her age read and take delight in, and the same rule has been observed in placing in her hands books printed in raised letters. She has a great fondness for reading, grasps the ideas quickly, and has a faculty of embodying them in language often quite different from that used by the author; for instance, while reading to her from Dickens's "Child's History of England" I came to the sentence, "Still the spirit of the brave Britons was not broken." I asked her what she

thought that meant; she replied, "I think it means that the brave Britons were not discouraged because the Romans had won so many battles, and they wished all the more to drive them away." The very next lines are still more idiomatic: "When Suetonius left the country, they fell upon his troops and retook the island of Anglesea." This is her interpretation of the sentence: "It means, that when the Roman general had gone away, the Britons began to fight again; and because the Roman soldiers had no general to tell them what to do, they were overcome by the Britons, and lost the island they had captured." During the first year spent with Helen I read to her one day a pretty story called "Hyacinthus" which I found in a plant and flower-seed catalogue; it impressed her very much, and she made great use of it in her conversation and writing for some time after.

She commits to memory both prose and poetry in large measure, and many times surprises us by repeating pages from some favorite author, when we have not previously known that she had memorized any portion of the work. Sometimes it seems as if she absorbed the ideas and even the words of a writer, and, not having the key to their exact meaning, they lay dormant in her mind until some experience brought their application to her, when a comprehension of their meaning and significance flashed the language before her mental vision.

She is a great admirer of the writings of Dr. Oliver Wendell Holmes, and has committed to memory many of his poems. During the winter of 1889-90, which we spent at the Perkins Institution in South Boston, she was a member of a class in zoölogy. One day, the teacher, Miss Bennett, was explaining to the class the habit of the chambered nautilus; holding the shell of the mollusk in her hand, she minutely described it in detail. I sat by Helen's side, repeating the instruction to her with my fingers. When the shell was passed to her, in turn, for examination, she felt it over very carefully, rose to her feet, and, greatly to my surprise and astonishment, slowly repeated Dr. Holmes's beautiful poem on this subject, "The Chambered Nautilus."

During this winter (1891-92) I went with her into the yard while a light snow was falling, and let her feel the falling flakes. She appeared to enjoy it very much indeed. As we went in, she repeated these words: "Out of the cloud-folds of

his garments Winter shakes the snow." I inquired of her where she had read this; she did not remember having read it, did not seem to know that she had learned it. As I did not remember ever hearing or reading it, I inquired of several of my friends if they recalled the words or description; no one seemed to remember it. The teachers at the Institution expressed the opinion that the description did not appear in any book in raised print in that library; but one lady, Miss Marrett, took upon herself the task of examining books of poems in ordinary type, and was rewarded by finding the following lines in one of Longfellow's minor poems, entitled "Snow-flakes:"

Out of the bosom of the air,
Out of the cloud-folds of her garments shaken,
Over the woodlands brown and bare,
Over the harvest-fields forsaken,
Silent, and soft, and slow
Descends the snow.

It would seem that Helen had learned and treasured the memory of this expression of the poet, and this morning in the snow-storm had found its application.

As the two principal avenues of perception were hopelessly closed to Helen at the commencement of her education, and the manual alphabet appealed more directly and forcibly to her remaining sense of touch than any other known medium of communication, it was made the channel through which her ideas could flow. She became very proficient in its use; ordinary conversation could be communicated to her with comparative ease, and she could herself spell eighty common words in a minute. For three years the manual alphabet had been her only means of intercourse with the outside world; by its means she had acquired a comprehensive vocabulary, which enabled her to converse freely, read intelligently, and write good idiomatic English. Nevertheless, the impulse to utter audible sounds was strong within her, and the constant efforts I made to repress this instinctive tendency were of no avail. I considered that if she could learn to speak, her inability to watch the lips of others would be an insurmountable obstacle in the way of her intelligent use of oral language.

During the winter of 1889-90 she became gradually conscious that her means of communication with others was different from that employed by her little friends and playmates at the Perkins Institution, and one day her thoughts found

expression in the following questions: "How do the blind girls know what to say with their mouths?" "Why do you not teach me to talk like them?" "Do deaf children ever learn to speak?" I explained that there were schools where deaf children were taught to speak, but that they could see their teachers' mouths, and learn partly in that way. She interrupted me to say that she was sure she could *feel* my mouth very well. A short time after this conversation a lady came to see her, and told her about the deaf and blind Norwegian child, Ragnhild Kaata, who had been taught to speak, and to understand, by touching the lips of her teacher, what he said to her. Helen's joy over this good news can be better imagined than described. "I am so delighted," she said, "for now I know that I shall learn to speak too." I promised to take her to see a kind lady who knew all about teaching the deaf, and who would know if it would be possible for her to learn to speak. "Oh, yes, I can learn," was her eager reply; "I know I can, because Ragnhild has learned to speak." She did not mention the subject again that day, but it was evident that she thought of little else, and that night she was not able to sleep.

She began immediately to make sounds, which she called *speaking*, and I saw the necessity of correct instruction, since her heart was set upon learning to talk. Accordingly, I went with her to ask the advice and assistance of Miss Sarah Fuller, the principal of the Horace Mann School for the Deaf, on Newbury street, Boston. Miss Fuller was much delighted with the child's earnestness and enthusiasm, and at once commenced to teach her. ♦

It was just three years from the day when Helen became conscious that she could communicate her physical wants, her thoughts, and her impressions through the arbitrary language of the fingers, to the time when she received her first lesson in the more natural and universal instrument of human intercourse—oral language. She was not content at first to be drilled in single sounds, but was impatient to pronounce words and sentences. The length of the word or the difficulty of the arrangement of the letters never seemed to discourage her. When she had been talking for less than a week, she met her friend Mr. Rodocanachi, and immediately began to struggle with the pronunciation of his name; nor would she give it up until she was able to articulate the word distinctly. Her interest in this instruction never diminished for a moment, and

in her eagerness to overcome the difficulties which beset her on all sides she taxed her powers to the utmost. In less than a month she was able to converse intelligibly in oral language. The child's own ecstasy of delight when she was first able to utter her thoughts in living and distinct speech was shared by all who witnessed the almost miraculous achievement. Her success was more complete and inspiring than even those had dreamed or expected who best knew her marvellous intelligence and great mental capacity.

She very much prefers to speak rather than to spell with her fingers, and makes rapid improvement in the art; she now uses speech almost exclusively, seldom employing her fingers in conversation except when she wishes to communicate a silent message, and is greatly pleased when told by strangers that they readily understand her articulation. She often reads aloud to the children at the Perkins Institution. I noticed her, not many days since, reading and repeating from memory to them from Miss Alcott's story of "Little Women."

She can read somewhat from our lips by the sense of touch, and could, I think, become quite expert in this practice, did we devote any time to assist her; as it is, she often surprises us by catching at the meaning of words and phrases as we utter them. She has already read in this way words in foreign languages with which she was not acquainted. She understands the necessity of close observation, and carefully notes the slightest vibrations resulting from articulation.

ANNIE M. SULLIVAN,

Teacher of Helen Keller.

WASHINGTON, D. C., *January 21, 1892.*

MISS A. M. SULLIVAN, Teacher of Helen Keller,

Perkins Institution for the Blind, South Boston.

DEAR MISS SULLIVAN: Allow me to thank you for the privilege of reading your account of how you taught Helen Keller, which you have prepared for the second edition of the Souvenir issued by the Volta Bureau. Your paper is full of interest to teachers of the deaf, and it contains many valuable and important suggestions.

I am particularly struck by your statement that you gave Helen books printed in raised letters "*long before she could read them,*" and that "*she would amuse herself for hours each day in carefully passing her fingers over the words, searching for such words as she knew,*" etc.

I consider that statement as of very great significance and importance when I try to account for her wonderful familiarity with idiomatic English. She is such an exceptional child that we are apt to attribute everything to her marvellous mind, and forget that language comes from without, and not from within. She could not intuitively arrive at a knowledge of idiomatic English expressions. It is absolutely certain that such expressions must have been *taught to her* before she could use them; and if you can show us how it was done, teachers of the deaf all over the world will owe you a debt of gratitude.

The great problem in the education of the deaf is the teaching of idiomatic language.

I am sure that instructors of the deaf will support me in urging you to tell us all you can as to the part played by books in the instruction of Helen Keller. We should like to form an idea of the quantity and quality of the reading-matter presented for her examination "long before she could read the books."

How much time did she devote to the examination of language which she could not understand, in her search for the words that she knew? I would suggest that you give us a list of the books she has read, arranging them, as well as you can, in the order of presentation. Teachers of the deaf find great difficulty in selecting suitable books for their pupils; and I am sure they would thank you especially for the names of those books that have given Helen pleasure, and have proved most profitable in her instruction.

You say, "*I have always talked to Helen as I would to a hearing child, and have insisted that others should do the same,*" etc. I presume you mean by this that you talked *with your fingers* instead of your mouth; that you spelled into her hand what you would have spoken to a seeing and hearing child. You say that you have "always" done this. Are we to understand that you pursued this method from the very beginning of her education, and that you spelled complete sentences and idiomatic expressions into her hand *before she was capable of understanding the language employed?* If this is so, I consider the point to be of so much importance that I would urge you to elaborate the statement, and make your meaning perfectly clear and unmistakable.

Yours very sincerely,

ALEXANDER GRAHAM BELL.

SOUTH BOSTON, MASS., *January 26, 1892.*

DR. ALEXANDER GRAHAM BELL.

DEAR SIR: Thanking you for your very complimentary mention of my paper prepared for the second edition of the Souvenir "Helen Keller," I will say that it gives me pleasure to reply to your inquiries; and I shall be much gratified if the teachers of the deaf can derive, from my experience with my interesting little pupil, any assistance and encouragement in imparting to deaf children a knowledge and command of idiomatic language.

The little deaf and blind child, Helen Keller, whom it was my good fortune to have placed under my care almost five years since, appealed to my woman's heart on account of her misfortune, with which in part I knew from experience how to sympathize, and at once won my affection by her sweet and loving nature. As soon as we were able to communicate with each other by means of the manual alphabet, I was enabled to become a substitute to her for sight and hearing. I began talking to her with my fingers as soon as I could make her comprehend the *meaning* I wished to convey. Of course, at first we could proceed but slowly; but as each sentence was an aid to the next one, she gained rapidly in a knowledge of words, and by this means I was soon able to give her a better acquaintance with her surroundings. I talked to her almost incessantly in her waking hours; spelled into her hand a description of what was transpiring around us, what I saw, what I was doing, what others were doing—any thing, every thing. Of course, in doing this I used multitudes of words she did not at the time understand, and the exact definition of which I did not pause to explain; but I never abbreviated or omitted words, but spelled all my sentences carefully and correctly. I talked to this little girl with my fingers as I should have talked to her with my mouth had she been a hearing child; and no doubt I talked much more with my fingers, and more constantly, than I should have done with my mouth had she possessed the use of sight and hearing, for, had she the full use of these senses, she would have been less dependent on me for amusement and entertainment. When she had become familiar with the raised letters, and had cards and books placed in her hands printed in this style, they were at once an unfailing source of entertainment and instruction to her.

You ask me to tell all I can "as to the part played by books

in the instruction of Helen Keller." I do not know that I can describe to you the importance and advantage that books have been to my pupil in acquiring a command of idiomatic English: the advantage has been incalculable. I am confident that Helen's remarkable command of language is due to the fact that books printed in raised letters were placed in her hands as soon as she knew the formation of the letters; it at once became her delight to study these pages, with her sensitive fingers, for many hours each day, not as a lesson, but as a pastime. I was astonished at the rapidity with which she acquired the use of words she had learned by first finding them on the printed page, inquired of me their meaning, and applied them in constructing sentences. It was not long before she would repeat to me a story she had read in her book; I mean, from the mass of words she had passed her fingers over, she would many times become possessed of the plot or basis of the tale, and recount it to me with her fingers, using any words by which she could make me understand her meaning, often the same used in the book for several sentences: the full meaning of many of these words she could not have understood but by their connection with others which she did know. Sometimes, in amusing herself in this way with her books, she would become completely puzzled, and come to me for help. I would then read to her (always spelling the words into her hand), when with great eagerness she would re-read it for herself with a bright and happy face, always expecting my sympathy and companionship to talk the story over with her, and participate in her appreciation of the author's portrayal of his subject. In doing this we naturally made use of many forms of expression not found in the book, and thus she readily discovered the meaning of words not previously understood. The more Helen used her books, the more she desired to do so, and much time was spent in the manner described.

In regard to the quantity and quality of books furnished Helen before she knew many words, I cannot give a list that will be of much value to teachers of the deaf, as, on account of Helen's double misfortune, she could not be supplied, as deaf children can who have the sense of sight, with a selection from the almost limitless number of beautifully printed and illustrated books for children of all ages which our bookstores so generously display.

I could only read to her with my fingers, and describe to

her in the same manner the illustrations, from any of these interesting and attractive publications. The expense of printing books for the use of the blind is enormously greater in proportion than for ordinary printing. A book that one could purchase for from twenty-five to fifty cents, for the use of a seeing child, would, if prepared for the use of a blind child, cost at least three dollars.

The only books which I had to place in Helen's hands at the beginning of my work with her were the Primer and a series of seven volumes of school readers such as are in use in the Primary Department at the Perkins Institution at South Boston; these eight volumes and a copy of "Our World" (a geography) constituted our entire library of books in raised print for many months. As to how much time was spent by this little girl in passing her fingers over the pages in these volumes, searching for such words as she knew, I cannot give you a definite estimate, any more than I could tell you how much time she gave to her doll or to her toys; but she preferred the books to either doll or toys, and spent much more time with them. Very many happy hours were devoted to this practice with her books every day; it often required special pleading to induce her to leave them. In March, 1888, Mr. Anagnos sent her a copy of a Geographical Reader in raised print. She was very much pleased with it, and took great delight in the discovery of many entirely new words to her on its pages. Not long after this she had two volumes of a series of readers termed "Youth's Libraries," selections in prose and poetry from various authors, and a child's book entitled "Heidi." When we came to Boston, in May of this year, she had access to a variety of literature in raised print at the library of the Institution. She read "Life and her Children," by Isabel Berkeley; "What Katy Did;" "Patsy;" "Story of a Short Life," etc. In the meantime I had been reading to her, by spelling the words into her hand, such books and selections as I had at command of the character that other children of her age enjoy. In August, 1888, I read to her in this way the popular story by Mrs. Burnett, "Little Lord Fauntleroy." Her delight in the book knew no bounds, and in response to her earnest entreaty Mr. Anagnos had this story put in raised print: since then she has re-read it many times for herself.

As I have never kept a record of the books Helen has read, or of the order in which I have read books to her, therefore it

will be impossible for me to comply with your request in full; but among the books which Helen has read and enjoyed particularly, I recall "Most Celebrated Diamonds;" "Little Women;" "Tanglewood Tales;" "Wonder Book;" "In His Name;" "A Man without a Country;" "Bible Stories;" "Greek Heroes;" "Swiss Family Robinson;" "The Sleeping Sentinel;" "Stories by Hans Christian Andersen;" "The Queen of the Pirate Isles;" "Christmas Carol" (Dickens); "Child's History of England" (Dickens); "American Prose Selections;" "Birds' Christmas Dinner;" "Sara Crewe;" "Evangeline;" "Hiawatha," and many other of Longfellow's Poems; "Enoch Arden;" Holmes's Poems; Whittier's Poems; "Stories of American Progress," etc., etc.

In addition to the story by Mrs. Burnett before mentioned, the following are titles of books which I remember to have read to Helen since that date: "Queens at Home," "Triangular Society," "Donald and Dorothy," "Black Beauty," "Capt. January," three of Abbott's Rollo books (Rome, Germany, and Naples), "Little St. Elizabeth," "Stories from Roman History," "Stories from Shakespeare" (by Charles and Mary Lamb), "The Birds' Christmas Carol," "Veronica," etc.

Yours truly,

ANNIE M. SULLIVAN.

CHELSEA, MASS., *March* 15, 1892.

HON. JOHN HITZ,

Superintendent of the Volta Bureau, Washington, D. C.

DEAR SIR: Since my paper was prepared for the second edition of the Souvenir "Helen Keller," some facts have been brought to my notice which are of interest in connection with the subject of the acquisition of language by my little pupil, and if it is not already too late for publication in this issue of the Souvenir, I shall be glad if I may have opportunity to mention them in detail.

Perhaps it will be remembered that in my paper, where allusion is made to Helen's remarkable memory, it is noted that she appears to retain in her mind many forms of expression which, at the time they are received, she probably does not understand; but when further information is acquired, the language retained in her memory finds full or partial expression in her conversation or writing, according as it proves of greater or less value to her in the fitness of its application to

the new experience. Doubtless this is true in the case of every intelligent child, and should not, perhaps, be considered worthy of especial mention in Helen's case, but for the fact that a child who is deprived of the senses of sight and hearing might not be expected to be as mentally gifted as this little girl proves to be; hence it is quite possible we may be inclined to class as marvellous many things we discover in the development of her character which do not merit such an explanation.

In the hope that I may be pardoned if I appear to overestimate the remarkable mental capacity and power of comprehension and discrimination which my little pupil possesses, I wish to add that, while I have always known that Helen made great use of such descriptions and comparisons as appeal to her imagination and fine poetic nature, yet recent developments in her writings convince me of the fact that I have not in the past been fully aware to what extent she absorbs the language of her favorite authors. In the early part of her education I had full knowledge of all the books she read and of nearly all the stories which were read to her, and could without difficulty trace the authority of any adaptations noted in her writing or conversation; and I have always been much pleased to observe how appropriately she applies the expressions of a favorite author in her own compositions.

The following extracts from a few of her published letters give evidence of how valuable this power of retaining the memory of beautiful language has been to her. One warm, sunny day in early spring, when we were at the North, the balmy atmosphere appears to have brought to her mind the sentiment expressed by Longfellow in "Hiawatha," and she almost sings with the poet, "The ground was all aquiver with the stir of new life. My heart sang for very joy. I thought of my own dear home. I knew that in that sunny land spring had come in all its splendor. 'All its birds and all its blossoms, all its flowers and all its grasses.'"

About the same time, in a letter to a friend, in which she makes mention of her Southern home, she gives so close a reproduction from a poem by one of her favorite authors that I will give extracts from Helen's letter and from the poem itself:

EXTRACT FROM HELEN'S
LETTER.

[*The entire letter is published on pp. 245 and 246 of the Report of the Perkins Institution for 1891.*]

The blue-bird with his azure plumes, the thrush clad all in brown, the robin jerking his spasmodic throat, the oriole drifting like a flake of fire, the jolly bobolink and his happy mate, the mocking-bird imitating the notes of all, the red-bird with his one sweet trill, and the busy little wren, are all making the trees in our front yard ring with their glad songs.

FROM THE POEM ENTITLED
"SPRING," BY DR. OLIVER WENDELL HOLMES.

The blue-bird, breathing from
his azure plumes
The fragrance borrowed from
the myrtle blooms ;
The thrush, poor wanderer, dropping meekly down,
Clad in his remnant of autumnal brown ;
The oriole, drifting like a flake of fire
Rent by a whirlwind from a blazing spire ;
The robin, jerking his spasmodic throat,
Repeats imperious, his *staccato* note ;
The crack-brained bobolink courts his crazy mate,
Poised on a bullrush tipsy with his weight :
Nay, in his cage the lone canary sings,
Feels the soft air, and spreads his idle wings.

On the last day of April she uses another expression from the same poem, which is more an adaptation than a reproduction : "To-morrow April will hide her tears and blushes beneath the flowers of lovely May."

In a letter to a friend at the Perkins Institution, dated May 17, 1889, she gives a reproduction from one of Hans Christian Andersen's stories, which I had read to her not long before. This letter is published in the Perkins Institution Report (1891), p. 204. The original story was read to her from a copy of "Andersen's Stories," published by Leavitt & Allen Bros., and may be found on p. 97 of Part I in that volume.

Her admiration for the impressive explanations which Bishop Brooks has given her of the Fatherhood of God is well known. In one of his letters, speaking of how God in every way tells us of his love, he says : "I think he writes it even upon the walls of the great house of nature which we live in that he is our Father." The next year at Andover she said : "It seems to me the world is full of goodness, beauty, and love ; and how grateful we must be to our heavenly Father, who has given us

so much to enjoy! His love and care are written all over ~~the~~ the walls of nature."

In these later years, since Helen has come in contact with ~~a~~ so many persons who are able to converse freely with her, she ~~has~~ has made the acquaintance of some literature with which I am ~~not~~ not familiar; she has also found, in books printed in raised letters, in the reading of which I have been unable to follow her, ~~m~~uch material for the cultivation of the taste she possesses for poetical imagery. The pages of the book she reads become to ~~her~~ her like paintings, to which her imaginative powers give life ~~and~~ and color. She is at once transported into the midst of the events portrayed in the story she reads or is told, and the characters and descriptions become real to her; she rejoices when justice wins, and is sad when virtue goes unrewarded. The pictures the language paints on her memory appear to make an indelible impression; and many times, when an experience comes to her similar in character, the language starts forth with ~~won~~derful accuracy, like the reflection from a mirror.

Helen's mind is so gifted by nature that she seems able to understand with only the faintest touch of explanation ~~every~~ every possible variety of external relations. One day in Alabama, ~~as~~ as we were gathering wild flowers near the springs on the ~~hill~~ hill sides, she seemed to understand for the first time that ~~the~~ the springs were surrounded by mountains, and she exclaimed "The mountains are crowding around the springs to look at their own beautiful reflections!" I am not able to state ~~where~~ where she obtained this language, yet it is evident that it must ~~have~~ have come to her from without, as it would hardly be possible ~~for~~ for a person deprived of the visual sense to originate such a description. In mentioning a visit to Lexington, Mass., she ~~writes~~ writes: "As we rode along we could see the forest monarchs bend ~~their~~ their proud forms to listen to the little children of the woodlands whispering their secrets. The anemone, the wild violet, ~~the~~ the hepatica, and the funny little curled-up ferns all peeped out ~~at~~ at us from beneath the brown leaves." She closes this letter ~~with~~ with, "I must go to bed, for Morpheus has touched my ~~eyes~~ eyelids with his golden wand." Here, again, I am unable to ~~state~~ state where she acquired these expressions.

She has always seemed to prefer stories which exercise ~~the~~ the imagination, and catches and retains the poetic spirit in all ~~such~~ such literature; but not until this winter have I been ~~conscious~~ conscious that her memory absorbed the exact language of imaginative ~~writing~~ writing.

ings to such an extent that she is herself unable to trace their authority

This is shown in a little story she wrote in October last at the home of her parents in Tuscumbia, which she termed "Autumn Leaves." She was at work upon it about two weeks, writing a little each day, at her own pleasure. When it was finished, and we read it in the family, it occasioned much comment on account of the beautiful imagery used, and we could not understand how Helen could describe such pictures without the aid of sight. As we had never seen or heard of any such story as this before, we inquired of her where she read it; she replied, "I did not read it; it is my story for Mr. Anagnos's birthday." While I was surprised that she could write like this, I was not more astonished than I had been many times before at the unexpected achievements of my little pupil, especially as we had exchanged many beautiful thoughts on the subject of the glory of the ripening foliage during the autumn of this year.

Before Helen made her final copy of the story, it was suggested to her to change its title to "The Frost King," as more appropriate to the subject of which the story treated: to this she willingly assented. The story was written by Helen in Braille, as usual, and copied by her in the same manner: I then interlined the manuscript for the greater convenience of those who desired to read it. Helen wrote a little letter, and, enclosing the manuscript, forwarded both by mail to Mr. Anagnos for his birthday.

The story was printed in the January number of the *Menorah*, and from a review of it in the *Goodson Gazette* I was startled to find that a very similar story had been published in 1873, seven years before Helen was born. This story, "Frost Fairies," appeared in a book written by Miss Margaret T. Canby, entitled "Birdie and his Fairy Friends." The passages quoted from the two stories were so much alike in thought and expression as to convince me that Miss Canby's story must at some time have been read to Helen.

As I had myself never read this story, or even heard of the book, I inquired of Helen if she knew anything about the matter, and found she did not. She was utterly unable to recall either the name of the story or the book. Careful examination was made of the books in raised print in the library of the Perkins Institution to learn if any extracts from this

volume could be found there; but nothing was discovered. I then concluded that the story must have been read to her a long time ago, as her memory usually retains with great distinctness facts and impressions which have been committed to its keeping.

After making careful inquiry, I succeeded in obtaining the information that our friend Mrs. S. C. Hopkins had a copy of this book in 1888, which was presented to her little daughter in 1873 or 1874. Helen and myself spent the summer of 1888 with Mrs. Hopkins at her home in Brewster, Mass., where she kindly relieved me, a part of the time, of the care of my little charge. She amused and entertained Helen by reading to her from a collection of juvenile publications, among which was the copy of "Birdie and his Fairy Friends;" and, while Mrs. Hopkins does not remember this story of "Frost Fairies," she is confident that she read to Helen extracts, if not entire stories, from this volume. But as she was not able to find her copy, and applications for the volume at bookstores in Boston, Albany, New York, Philadelphia, and other places resulted only in failure, search was instituted for the author herself. This became a difficult task, as her publishers in Philadelphia had retired from business many years ago; however, it was eventually discovered that her residence is at Wilmington, Delaware, and copies of the second edition of the book, 1889, were obtained from her. She has since secured and forwarded to me a copy of the first edition. I learn from Miss Canby that several of the fairy stories contained in this book were first printed in a popular magazine entitled *Our Young Folks*, published in Boston 1865-'73.

The most generous and gratifying letters have been received from Miss Canby by Helen's friends, a few extracts from which are given.

Under date of February 24, 1892, after mentioning the order of the publication of the stories in the magazine, she writes:

All the stories were revised before publishing them in book form: additions were made to the number as first published, I think, and some of the titles may have been changed.

In the same letter she writes:

I hope that you will be able to make her understand that I am glad she enjoyed my story, and that I hope the new book will give her pleasure by renewing her friendship with the Fairies. I shall write to her in a short time. I am so much impressed with what I have learned of her that I have written a little poem entitled "A Silent Singer," which I may

send to her mother after a while. Can you tell me in what paper the article appeared accusing Helen of plagiarism, and giving passages from both stories? I should like much to see it, and to obtain a few copies if possible.

Under date of March 9, 1892, Miss Canby writes:

I find traces, in the Report which you so kindly sent me, of little Helen having heard other stories than that of "Frost Fairies." On page 132, in a letter, there is a passage which must have been suggested by my story called "The Rose Fairies" (see pp. 13-16 of "Birdie"), and on pages 93 and 94 of the Report the description of a thunder-storm is very much like Birdie's idea of the same in the "Dew Fairies" on pages 59 and 60 of my book. What a wonderfully active and retentive mind that gifted child must have! If she had remembered and written down, accurately, a short story, and that soon after hearing it, it would have been a marvel; but to have heard the story once, three years ago, and in such a way that neither her parents nor teacher could ever allude to it or refresh her memory about it, and then to have been able to reproduce it so vividly, even adding some touches of her own in perfect keeping with the rest, which really improve the original, is something that very few girls of riper age, and with every advantage of sight, hearing, and even great talents for composition, could have done as well, if at all. Under the circumstances, I do not see how any one can be so unkind as to call it a plagiarism; it is a wonderful feat of memory, and stands *alone*, as doubtless much of her work will in future, if her mental powers grow and develop with her years as greatly as in the few years past. I have known many children well, have been surrounded by them all my life, and love nothing better than to talk with them, amuse them, and quietly notice their traits of mind and character; but I do not recollect more than one girl of Helen's age who had the love and thirst for knowledge, and the store of literary and general information, and the skill in composition, which Helen possesses. She is indeed a "Wonder-Child." Thank you very much for the Report, *Gazette*, and Helen's Journal. The last made me realize the great disappointment to the dear child more than before. Please give her my warm love, and tell her not to feel troubled about it any more. No one shall be allowed to think it was anything wrong; and some day she will write a great, beautiful story or poem that will make many people happy. Tell her there are a few bitter drops in every one's cup, and the only way is to take the bitter patiently, and the sweet thankfully. I shall love to hear of her reception of the book, and how she likes the stories which are new to her.

I have carefully compared the stories published in *Our Young Folks* with the compilation entitled "Birdie and his Fairy Friends," and find great differences in the phraseology. The language used by Helen in the adaptations mentioned by Miss Canby resembles that of the book and not that of the magazine; and the story of the "Frost Fairies" is not found in *Our Young Folks* at all.

The book was evidently her source of information, but there is no evidence to show from which edition the stories were read. Both editions were printed from the same plates, and the language is identical.

I have now (March, 1892) read to Helen "The Frost Fairies," "The Rose Fairies," and a portion of "The Dew Fairies," but she is unable to throw any light on the matter. She recognized them at once as her own stories, with variations, and was much puzzled to know how they could have been published before she was born! She thinks it is wonderful that two people should write stories so much alike; but she still considers her own as original with herself.

I give below a portion of Miss Canby's story, "The Rose Fairies," and also Helen's letter to Mr. Anagnos containing her "dream," so that the likenesses and differences may be studied by those interested in the subject:

THE ROSE FAIRIES.

[From "*Birdie and his Fairy Friends*," by Margaret T. Canby.]

One pleasant morning little Birdie might have been seen sitting quietly on the grass-plot at the side of his mother's house, looking very earnestly at the rose-bushes.

It was quite early; great Mr. Sun, who is such an early riser in summer time, had not been up very long; the birds were just beginning to chirp their "good mornings" to each other; and as for the flowers, they were still asleep. But Birdie was so busy all day, trotting about the house and garden, that he was always ready for *his* nest at night, before the birds and flowers had thought of seeking *theirs*; and so it came to pass that when Mr. Sun raised his head above the green woods and smiled lovingly upon the earth, Birdie was often the first to see him, and to smile back at him, all the while rubbing his eyes with his dimpled fists, until, between smiling and rubbing, he was wide awake.

And what do you think he did next? Why the little rogue rolled into his mamma's bed, and kissed her eyelids, her cheeks, and her mouth, until she began to dream that it was raining kisses; and at last she opened her eyes to see what it all meant, and found that it was Birdie, trying to "kiss her awake," as he said.

She loved her little boy very dearly, and liked to make him happy, and when he said "Please dress me, dear mamma, and let me go out to play in the garden," she cheerfully consented; and, soon after, Birdie went down-stairs in his morning-dress of cool linen, and with his round face bright and rosy from its bath, and ran out on the gravel path to play until breakfast was ready.

He stood still a moment to look about him, and think what he should do first. The fresh morning air blew softly in his face, as if to welcome him and be his merry playmate; and the bright eye of Mr. Sun looked at him with a warm and glowing smile; but Birdie soon walked on to

find something to play with. As he came in sight of the rose-bushes that grew near the side of the house, he suddenly clapped his hands, and with a little shout of joy stopped to look at them; they were all covered with lovely rose-buds. Some were red, some white, and others pale pink, and they were just peeping out of the green leaves, as rosy-faced children peep out from their warm beds in winter-time before they are quite willing to get up. A few days before, Birdie's papa had told him that the "green balls" on the rose-bushes had beautiful flowers shut up within them, but the little boy found it hard to believe, for he was so young that he did not remember how pretty the roses had been the summer before. Now he found out that his father's words were true, for a few days of warm weather had turned the "green balls" into rose-buds, and they were so beautiful that it was enough to make Birdie stand still before them, his blue eyes dancing with delight, and his little hands clasped tightly together.

After a while he went nearer, and, looking closely at the buds, found that they were folded up, leaf over leaf, as eyelids are folded over sleeping eyes, so that Birdie thought they must be asleep. "Lazy roses, wake up," said he, giving the branches a gentle shake; but only the dew fell off in bright drops, and the flowers were still shut up. At last Birdie remembered how he had awakened his mother with kisses, and thought he would try the same plan with the roses; so he drew up his red lips until *they* looked like a rose-bud too, and bending down a branch with a lovely pink bud upon it, he kissed it softly two or three times.

Here the similarity in the language of the story to that in the letter ceases.

HELEN'S LETTER TO MR. ANAGNOS.

(Written February 2 and 3, 1890.)

[*This letter was enclosed in another written in French, dated
Le 1 fevrier 1890.*]

MY DEAR MR. ANAGNOS: You will laugh when you open your little friend's letter and see all the queer mistakes she has made in French, but I think you will be pleased to know that I can write even a short letter in French. It makes me very happy to please you and my dear teacher. I wish I could see your little niece Amelia. I am sure we should love each other. I hope you will bring some of Virginia Evangelides' poems home with you, and translate them for me. Teacher and I have just returned from our walk. It is a beautiful day. We met a sweet little child. She was playing on the pier with a wee brother. She gave me a kiss and then ran away, because she was a shy little girl. I wonder if you would like to have me tell you a pretty dream which I had a long time ago when I was a very little child? Teacher says it was a day-dream, and she thinks you would be delighted to hear it. One pleasant morning in the beautiful spring time, I thought I was sitting on the soft grass under my dear mother's window, looking very earnestly at the rose-bushes which were growing all around me. It was quite early, the sun had not been up very long; the birds were just beginning to sing joyously. The flowers were still asleep. They would not awake

until the sun had smiled lovingly upon them. I was a very happy little child with rosy cheeks, and large blue eyes, and the most beautiful golden ringlets you can imagine. The fresh morning air blew gently in my face, as if to welcome me, and be my merry playmate, and the sun looked at me with a warm and tender smile. I clapped my chubby hands for joy when I saw that the rose-bushes were covered with lovely buds. Some were red, some were white, and others were delicate pink, and they were peeping out from between the green leaves like beautiful little fairies. I had never seen anything so lovely before, for I was very young and I could not remember how pretty the roses had been the summer before. My little heart was filled with a sweet joy, and I danced around the rose-bushes to show my delight. After a while I went very near to a beautiful white rose-bush which was completely covered with buds and sparkling with dew-drops; I bent down one of the branches with a lovely pure white bud upon it, and kissed it softly many times; just then I felt two loving arms steal gently around me, and loving lips kissing my eyelids, my cheeks, and my mouth, until I began to think it was raining kisses; and at last I opened my eyes to see what it all meant, and found it was my precious mother, who was bending over me, trying to kiss me awake. Do you like my day-dream? If you do, perhaps I will dream again for you some time.

Teacher and all of your friends send you their love. I shall be so glad when you come home, for I greatly miss you. Please give my love to your good Greek friends, and tell them that I shall come to Athens some day.

Lovingly your little friend and playmate,

HELEN A. KELLER.

“The Frost Fairies” and “The Frost King” are given in full, as the differences are as important as the resemblances:

“THE FROST FAIRIES.”

[From “*Birdie and his Fairy Friends*,” by Margaret T. Canby.]

King Frost, or Jack Frost as he is sometimes called, lives in a cold country far to the North; but every year he takes a journey over the world in a car of golden clouds drawn by a strong and rapid steed called “North Wind.” Wherever he goes he does many wonderful things; he builds bridges over every stream clear as glass in appearance, but often strong as iron; he puts the flowers and plants to sleep by one touch of his hand, and they all bow down and sink into the warm earth, until spring returns; then, lest we should grieve for the flowers, he places at our windows lovely wreaths and sprays of his white northern flowers, or delicate little forests of fairy pine-trees, pure white and very beautiful. But his most wonderful work is the painting of the trees, which look, after his task is done, as if they were covered with the brightest layers of gold and rubies; and are beautiful enough to comfort us for the flight of summer.

I will tell you how King Frost first thought of this kind work, for it is a strange story. You must know that this king, like all other kings, has great treasures of gold and precious stones in his palace; but, being a

good-hearted old fellow, he does not keep his riches locked up all the time, but tries to do good and make others happy with them. He has two neighbors, who live still farther north; one is King Winter, a cross and churlish old monarch, who is hard and cruel, and delights in making the poor suffer and weep; but the other neighbor is Santa Claus, a fine, good-natured, jolly old soul, who loves to do good, and who brings presents to the poor, and to nice little children at Christmas.

Well, one day King Frost was trying to think of some good that he could do with his treasure; and suddenly he concluded to send some of it to his kind neighbor, Santa Claus, to buy presents of food and clothing for the poor, that they might not suffer so much when King Winter went near their homes. So he called together his merry little fairies, and showing them a number of jars and vases filled with gold and precious stones, told them to carry those carefully to the palace of Santa Claus, and give them to him with the compliments of King Frost. "He will know how to make good use of the treasure," added Jack Frost; then he told the fairies not to loiter by the way, but to do his bidding quickly.

The fairies promised obedience and soon started on their journey, dragging the great glass jars and vases along, as well as they could, and now and then grumbling a little at having such hard work to do, for they were idle fairies, and liked play better than work. At last they reached a great forest, and, being quite tired, they decided to rest awhile and look for nuts before going any further. But lest the treasure should be stolen from them, they hid the jars among the thick leaves of the forest trees, placing some high up near the top, and others in different parts of the various trees, until they thought no one could find them.

Then they began to wander about and hunt for nuts, and climb the trees to shake them down, and worked much harder for their own pleasure than they had done for their master's bidding, for it is a strange truth that fairies and children never complain of the toil and trouble they take in search of amusement, although they often grumble when asked to work for the good of others.

The frost fairies were so busy and so merry over their nutting frolic that they soon forgot their errand and their king's command to go quickly; but, as they played and loitered in the forest until noon, they found out the reason why they were told to hasten; for although they had, as they thought, hidden the treasure so carefully, they had not secured it from the power of Mr. Sun, who was an enemy of Jack Frost, and delighted to undo his work and weaken him whenever he could.

His bright eyes found out the jars of treasure among the trees, and as the idle fairies left them there until noon, at which time Mr. Sun is the strongest, the delicate glass began to melt and break, and before long every jar and vase was cracked or broken, and the precious treasures they contained were melting too, and dripping slowly in streams of gold and crimson over the trees and bushes of the forest.

Still, for a while, the frost fairies did not notice this strange occurrence, for they were down on the grass, so far below the tree-tops that the wonderful shower of treasure was a long time in reaching them; but at last one of them said "Hark! I believe it is raining; I certainly hear the

falling drops." The others laughed, and told him that it seldom remained when the sun was shining; but as they listened they plainly heard the tinkling of many drops falling through the forest, and sliding from leaf to leaf until they reached the bramble-bushes beside them, when, to their great dismay, they found that the *rain-drops* were melted which hardened on the leaves and turned them to bright crimson in a moment. Then looking more closely at the trees around, they saw that the treasure was all melting away, and that much of it was already spread over the leaves of the oak-trees and maples, which were shining with their gorgeous dress of gold and bronze, crimson and emerald. It was very beautiful; but the idle fairies were too much frightened at the mischief their disobedience had caused to admire the beauty of the forest, and at once tried to hide themselves among the bushes, lest King Frost should come and punish them.

Their fears were well founded, for their long absence had alarmed the king, and he had started out to look for his tardy servants, and just as they were all hidden, he came along slowly, looking on all sides for the fairies. Of course, he soon noticed the brightness of the leaves, and discovered the cause, too, when he caught sight of the broken jars and vases from which the melted treasure was still dropping. And when he came to the nut-trees, and saw the shells left by the idle fairies and all the traces of their frolic, he knew exactly how they had acted, and that they had disobeyed him by playing and loitering on their way through the woods.

King Frost frowned and looked very angry at first, and his fairies trembled for fear and cowered still lower in their hiding-places; but just then two little children came dancing through the wood, and though they did not see King Frost or the fairies, they saw the beautiful color of the leaves, and laughed with delight, and began picking great bunches to take to their mother. "The leaves are as pretty as flowers," said they: and they called the golden leaves "buttercups," and the red ones "roses," and were very happy as they went singing through the wood.

Their pleasure charmed away King Frost's anger, and he, too, began to admire the painted trees, and at last he said to himself, "My treasures are not wasted if they make little children happy. I will not be offended at my idle, thoughtless fairies, for they have taught me a new way of doing good." When the frost fairies heard these words, they crept, one by one, from their corners, and, kneeling down before their master, confessed their fault, and asked his pardon. He frowned upon them for a while, and scolded them, too, but he soon relented, and said he would forgive them this time, and would only punish them by making them carry more treasure to the forest, and hide it in the trees, until all the leaves, with Mr. Sun's help, were covered with gold and ruby coats.

Then the fairies thanked him for his forgiveness, and promised to work very hard to please him; and the good-natured king took them all up in his arms, and carried them safely home to his palace. From that time, I suppose, it has been part of Jack Frost's work to paint the trees with glowing colors we see in the autumn: and if they are not covered with gold and precious stones, I do not know how he makes them so bright, do you?

THE FROST KING.

(Copied from the original manuscript in the Braille writing.)

By HELEN A. KELLER.

King Frost lives in a beautiful palace far to the North, in the land of perpetual snow. The palace, which is magnificent beyond description, was built centuries ago, in the reign of King Glacier. At a little distance from the palace we might easily mistake it for a mountain whose peaks were mounting heavenward to receive the last kiss of the departing day. But on nearer approach we should discover our error. What we had supposed to be peaks were in reality a thousand glittering spires. Nothing could be more beautiful than the architecture of this ice-palace. The walls are curiously constructed of massive blocks of ice which terminate in cliff-like towers. The entrance to the palace is at the end of an arched recess, and it is guarded night and day by twelve soldierly-looking white Bears.

But, children, you must make King Frost a visit the very first opportunity you have, and see for yourselves this wonderful palace. The old king will welcome you kindly, for he loves children, and it is his chief delight to give them pleasure.

You must know that King Frost, like all other kings, has great treasures of gold and precious stones; but as he is a generous old monarch he endeavors to make a right use of his riches. So wherever he goes he does many wonderful works; he builds bridges over every stream, as transparent as glass, but often as strong as iron; he shakes the forest trees until the ripe nuts fall into the laps of laughing children; he puts the flowers to sleep with one touch of his hand; then, lest we should mourn for the bright faces of the flowers, he paints the leaves with gold and crimson and emerald, and when his task is done the trees are beautiful enough to comfort us for the flight of summer. I will tell you how King Frost happened to think of painting the leaves, for it is a strange story.

One day while King Frost was surveying his vast wealth and thinking what good he could do with it, he suddenly bethought him of his jolly old neighbor Santa Claus. "I will send my treasures to Santa Claus," said the king to himself. "He is the very man to dispose of them satisfactorily, for he knows where the poor and the unhappy live, and his kind old heart is always full of benevolent plans for their relief." So he called together the merry little fairies of his household and, showing them the jars and vases containing his treasures, he bade them carry them to the palace of Santa Claus as quickly as they could. The fairies promised obedience, and were off in a twinkling, dragging the heavy jars and vases along after them as well as they could, now and then grumbling a little at having such a hard task, for they were idle fairies and loved to play better than to work. After a while they came to a great forest and, being tired and hungry, they thought they would rest a little and look for nuts before continuing their journey. But thinking their treasure might be stolen from them, they hid the jars among the thick green leaves of the various trees until they were sure that no one could find them. Then they began to wander merrily about searching for nuts,

climbing trees, peeping curiously into the empty birds' nests, and playing hide and seek from behind the trees. Now, these naughty fairies were so busy and so merry over their frolic that they forgot all about their errand and their master's command to go quickly, but soon they found to their dismay why they had been bidden to hasten, for although they had, as they supposed, hidden the treasure carefully, yet the bright eyes of King Sun had spied out the jars among the leaves, and as he and King Frost could never agree as to what was the best way of benefiting the world, he was very glad of a good opportunity of playing a joke upon his rather sharp rival. King Sun laughed softly to himself when the delicate jars began to melt and break. At length every jar and vase was cracked or broken, and the precious stones they contained were melting, too, and running in little streams over the trees and bushes of the forest.

Still the idle fairies did not notice what was happening, for they were down on the grass, and the wonderful shower of treasure was a long time in reaching them; but at last they plainly heard the tinkling of many drops falling like rain through the forest, and sliding from leaf to leaf until they reached the little bushes by their side, when to their astonishment they discovered that the rain-drops were melted rubies which hardened on the leaves, and turned them to crimson and gold in a moment. Then, looking around more closely, they saw that much of the treasure was already melted, for the oaks and maples were arrayed in gorgeous dresses of gold and crimson and emerald. It was very beautiful, but the disobedient fairies were too frightened to notice the beauty of the trees. They were afraid that King Frost would come and punish them. So they hid themselves among the bushes and waited silently for something to happen. Their fears were well founded, for their long absence had alarmed the king, and he mounted North Wind and went out in search of his tardy couriers. Of course, he had not gone far when he noticed the brightness of the leaves, and he quickly guessed the cause when he saw the broken jars from which the treasure was still dropping. At first King Frost was very angry, and the fairies trembled and crouched lower in their hiding-places, and I do not know what might have happened to them if just then a party of boys and girls had not entered the wood. When the children saw the trees all aglow with brilliant colors they clapped their hands and shouted for joy, and immediately began to pick great bunches to take home. "The leaves are as lovely as the flowers!" cried they, in their delight. Their pleasure banished the anger from King Frost's heart and the frown from his brow, and he, too, began to admire the painted trees. He said to himself, "My treasures are not wasted if they make little children happy. My idle fairies and my fiery enemy have taught me a new way of doing good."

When the fairies heard this they were greatly relieved and came forth from their hiding-places, confessed their fault, and asked their master's forgiveness.

Ever since that time it has been King Frost's great delight to paint the leaves with the glowing colors we see in the autumn, and if they are not covered with gold and precious stones I cannot imagine what makes them so bright, can you?

HELEN KELLER.

If the story of "The Frost Fairies" was read to Helen in the summer of 1888, I do not think she could have understood very much of it at that time, for she had only been under instruction since March, 1887.

Can it be that the language of the story had remained dormant in her mind until my description of the beauty of the autumn scenery in 1891 brought it vividly before her mental vision?

I have made careful investigation among Helen's friends in Alabama and in Boston and its vicinity, but thus far have been unable to ascertain any later date when it could have been read to her.

Another fact is of great significance in this connection. "The Rose Fairies" was published in the same volume with "The Frost Fairies," and, therefore, was probably read to Helen at or about the same time.

Now Helen, in her letter of February, 1890 (quoted above), alludes to this story of Miss Canby's as a dream "*which I had a long time ago when I was a very little child.*" Surely, a year and a half would appear "a long time ago" to a little girl like Helen; we therefore have reason to believe that the stories must have been read to her at least as early as the summer of 1888.

HELEN KELLER'S OWN STATEMENT.

(The following entry made by Helen in her diary speaks for itself.)

1892. January 30. This morning I took a bath, and when teacher came up-stairs to comb my hair she told me some very sad news which made me unhappy all day. Some one wrote to Mr. Anagnos that the story which I sent him as a birthday gift, and which I wrote myself, was not my story at all, but that a lady had written it a long time ago. The person said her story was called "Frost Fairies." I am sure I never heard it. It made us feel so sad to think that people thought we had been untrue and wicked. My heart was full of tears, for I love the beautiful truth with my whole heart and mind.

It troubles me greatly now. I do not know what I shall do. I never thought that people could make such mistakes. I am perfectly sure I wrote the story myself. Mr. Anagnos is much troubled. It grieves me to think that I have been the cause of his unhappiness, but of course I did not mean to do it.

I thought about my story in the autumn, because teacher told me about the autumn leaves while we walked in the woods at Fern Quarry. I thought fairies must have painted them because they are so wonderful, and I thought, too, that King Frost must have jars and vases containing precious treasures, because I knew that other kings long ago had, and

because teacher told me that the leaves were painted ruby, emerald, gold, crimson, and brown; so that I thought the paint must be melted stones. I knew that they must make children happy because they are so lovely, and it made me very happy to think that the leaves were so beautiful and that the trees glowed so, although I could not see them.

I thought everybody had the same thought about the leaves, but I do not know now. I thought very much about the sad news when teacher went to the doctor's; she was not here at dinner and I missed her.

I do not feel that I can add anything more that will be of interest. My own heart is too "full of tears" when I remember how my dear little pupil suffered when she knew "that people thought we had been untrue and wicked," for I know that she does indeed "love the beautiful truth with her whole heart and mind."

Yours truly,

ANNIE M. SULLIVAN.

A STATEMENT.

PERKINS INSTITUTION AND
MASSACHUSETTS SCHOOL FOR THE BLIND,
So. BOSTON, *March 11, 1892.*

To the Editor of the Annals.

SIR: In compliance with your wishes I make the following statement concerning Helen Keller's story of "King Frost." It was sent to me as a birthday gift on November 7th from Tuscumbia, Alabama. Knowing as well as I do Helen's extraordinary abilities I did not hesitate to accept it as her own work; nor do I doubt to-day that she is fully capable of writing such a composition. Soon after its appearance in print I was pained to learn, through the *Goodson Gazette*, that a portion of the story (eight or nine passages) is either a reproduction or adaptation of Miss Margaret Canby's "Frost Fairies." I immediately instituted an inquiry to ascertain the facts in the case. None of our teachers or officers who are accustomed to converse with Helen ever knew or heard about Miss Canby's book, nor did the child's parents and relatives at home have any knowledge of it. Her father, Captain Keller, wrote to me as follows on the subject:

I hasten to assure you that Helen could not have received any idea of the story from any of her relations or friends here, none of whom can communicate with her readily enough to impress her with the details of a story of that character.

At my request, one of the teachers in the girls' department examined Helen in regard to the construction of the story. Her testimony is as follows :

I first tried to ascertain what had suggested to Helen's mind the particular fancies which made her story seem like a reproduction of one written by Miss Margaret Canby. Helen told me that for a long time she had thought of Jack Frost as a king, because of the many treasures which he possessed. Such rich treasures must be kept in a safe place, and so she had imagined them stored in jars and vases in one part of the royal palace. She said that one autumn day her teacher told her, as they were walking together in the woods, about the many beautiful colors of the leaves, and she had thought that such beauty must make people very happy, and very grateful to King Frost. I asked Helen what stories she had read about Jack Frost. In answer to my question she recited a part of the poem called "Freaks of the Frost," and she referred to a little piece about winter, in one of the school readers. She could not remember that any one had ever read to her any stories about *King Frost*, but said she had talked with her teacher about *Jack Frost* and the wonderful things he did.

The only person that we supposed might possibly have read the story to Helen was her friend, Mrs. Hopkins, whom she was visiting at the time in Brewster. I asked Miss Sullivan to go at once to see Mrs. Hopkins and ascertain the facts in the matter. The result of her investigation is embodied in the printed note herewith enclosed.*

I have scarcely any doubt that Miss Canby's little book was read to Helen, by Mrs. Hopkins, in the summer of 1888. But the child has no recollection whatever of this fact. On Miss Sullivan's return to Brewster, she read to Helen the story of "Little Lord Fauntleroy," which she had purchased in Boston for the purpose. The child was at once fascinated and absorbed with the charming story, which evidently made a deeper impression upon her mind than any previously read to her, as was shown in the frequent reference to it, both in her conversation and letters, for many months afterward. Her intense interest in Fauntleroy must have buried all remembrance of "Frost Fairies," and when, more than three years later, she had acquired a fuller knowledge and use of language, and was told of Jack Frost and his work, the seed so long buried sprang up into new thoughts and fancies. This may explain the reason why Helen claims persistently that "King Frost" is her own story. She seems to have some idea of the difference be-

* This note is quoted in Dr. Williams's article in the present number of the *Annals*, page 157.—E. A. F.

tween original composition and reproduction. She did not know the meaning of the word "plagiarism" until quite recently, when it was explained to her. She is absolutely truthful. Veracity is the strongest element of her character. She was very much surprised and grieved when she was told that her composition was an adaptation of Miss Canby's story of "Frost Fairies." She could not keep back her tears, and the chief cause of her pain seemed to be the fear lest people should doubt her truthfulness. She said, with great intensity of feeling, "I love the beautiful truth." A most rigid examination of the child of about two hours' duration, at which eight persons were present and asked all sorts of questions with perfect freedom, failed to elicit in the least any testimony convicting either her teacher or any one else of the intention or attempt to practice deception.

In view of these facts I cannot but think that Helen, while writing "King Frost," was entirely unconscious of ever having had the story of "Frost Fairies" read to her, and that her memory has been accompanied by such a loss of associations that she herself honestly believed her composition to be original. This theory is shared by many persons who are perfectly well acquainted with the child and who are able to rise above the clouds of a narrow prejudice.

Very sincerely yours,

M. ANAGNOS,
*Director of the Perkins Institution and
Massachusetts School for the Blind.*

IS HELEN KELLER A FRAUD?

SINCE the appearance of the story of "The Frost King," there has been a great deal of sharp criticism of Helen Keller, and sharper still of her teachers. That that story should have been allowed to go forth to the public as an original composition was certainly very unfortunate. As a reproduction, which it has proved to be, it is still very remarkable, and had it appeared as such would have been received with marked favor. That the public felt a revulsion of feeling when they thought that they had been intentionally deceived is not to be wondered at.

If there was intentional deception on the part of those in charge of the child, the criticisms have been none too sharp


and the condemnation none too severe. But was there intentional deception?

When the parallel quotations from the original story and Helen Keller's version of it first appeared, I sent a copy of the paper containing them to Director Anagnos, and asked him to give me the facts in the case. His prompt reply was, in substance, that the revelation was a perfect surprise to him, and that while the evidence left no doubt that the story was a reproduction, he could find no knowledge of the story among the teachers or officers of the Perkins Institution, and that Helen said that she did not remember ever having heard it. He was seeking for further light, and when he could learn the facts of the case would make them known.

With the Sixtieth Annual Report of the Perkins Institution, just received, comes from Director Anagnos the following explanatory note:

Since this report was printed, I have received evidence, through the *Goodson Gazette*, of Staunton, Va., that the story by Helen Keller, entitled "King Frost," is an adaptation if not a reproduction of "Frost Fairies," which occurs in a little volume, "Birdie and his Fairy Friends," by Margaret T. Canby, published in 1873. I have made careful inquiry of her parents, her teacher, and those who are accustomed to converse with her, and have ascertained that Mrs. Sophia C. Hopkins had the volume in her possession in 1888, when Helen and her teacher were visiting her at her home in Brewster, Mass. In the month of August of that year the state of Miss Sullivan's health was such as to render it necessary for her to be away from her pupil for a while in search of rest. During the time of this separation Helen was left in charge of Mrs. Hopkins, who often entertained her by reading to her, and, though Mrs. Hopkins does not recollect this particular story, I presume it was included among the selections. No one can regret this mistake more than I.

Now it does not seem to me that the sweeping condemnation of everybody who has had to do with Helen Keller is at all just. On the evidence before us, is it fair to set down her teachers as tricksters and deceivers, intentionally misleading the public? Is it not far more just to believe that, carried away by their intense admiration of the child's abilities and her frequent remarkable performances, they were ready to believe her capable of producing anything, and so were themselves misled in this case? We cannot believe them guilty of the folly—the stupidity—of trying to palm off on the public as an original composition what they knew to be a reproduction. The almost absolute certainty of discovery, first or last, and the consequent casting of suspicion on all of Helen's genuine



work, to say nothing of higher motives, would have forbidden such an act.

The explanation, while destroying all claim to originality in conception, in imagination, or style, in this instance, yet increases rather than diminishes our wonder. That this story should sleep in the mind of this child for more than three years, until the fact of ever having heard it had faded from her memory, and then be reproduced by her almost *verbatim*, is certainly a very marvellous display of verbal memory.

Were this the only instance exhibiting this faculty it would be almost past belief. Fortunately, it is not. The Report above referred to is full of evidence on this point. Of the many productions from Helen's pen there are very few which do not exhibit it unmistakably. We do not mean by this that the productions are not genuinely her own; that she has not absorbed them and made them her own. But, after all, much of the language is the reproduction (perhaps unconsciously so) of the language of her teachers. Her marvellous verbal memory, holding everything as in a vice, and her vivid imagination, enabling her to enter into and keep pace with the imagination of her teachers, account, in a very large degree, for the beauty of her style and the accuracy and felicity of her language, though these are aided by an excellent memory of facts and reasoning powers of a high order.

It will not do to write down Helen Keller as "a fraud," "a humbug," "a back number," however much we may feel annoyed by the "Frost King" composition. She has been in the full blaze of public curiosity too long, and been tested by too many scientific men and educational experts, to be a successful deceiver. Every facility has been given for such tests, and I have never known of a failure.

Great verbal memory, though a rare gift, is present wherever the language faculty exists in a high degree. In fact, the latter is largely dependent upon the former, and could hardly exist without it. It is said of Macaulay, who had a marvellously wide range of information and was an omnivorous reader, that he could quote almost any fact which he wished to use in the exact words of the author from whom he obtained it.

With all men language is largely a matter of memory. Verbal memory is what gives the linguist his facility in language. He need not possess the reasoning power in marked degree,

and great reason power is often accompanied by halting speech, showing the possession of inferior verbal memory.

The attempt has been made in some quarters to attribute Helen Keller's success in language to her articulation. It will not stand on that ground for a minute. Her rare language-gift was perfectly manifest long before she received her first lesson in articulation, and to her previous knowledge was largely due her success in learning to speak—a success without a parallel in one deaf so young. I think it may fairly be said, on either side of the Atlantic. Hundreds of witnesses can testify to her fluency of speech. It is not natural, but it is intelligible—the true test of speech. It would be no more fair to claim Helen Keller as a fair sample of the results of articulation teaching to the deaf than to maintain that Solomon was a fair representative of the graduates of the schools of Jerusalem, or that in inventive talent Thomas Edison is an ordinary specimen of the men of America.

No! No school, no method of teaching, no teacher, can claim the merit of Helen Keller's success in acquiring speech. In the rapidity and accuracy with which she gained it she stands alone among all deaf children who have learned speech without the aid of hearing.

Taking this child all in all, and making due allowance for every possible aid that has been given her and for all unconscious exaggeration due to friendly admiration, there yet remains so much that is marvellous as to place her beyond comparison with any other child of whom we have ever heard. The whole history of literature reveals nothing equal to her language productions from one of her years, even among those possessed of all their faculties. She is a genius, a prodigy, a phenomenon.

JOB WILLIAMS, L. H. D.,
Principal of the American Asylum,
Hartford, Conn.

**THE SEVENTH CONFERENCE OF PRINCIPALS AND
SUPERINTENDENTS OF AMERICAN INSTITU-
TIONS FOR THE EDUCATION OF THE DEAF.**

NATIONAL DEAF MUTE COLLEGE,

WASHINGTON, D. C., *March* 19, 1892.

The Seventh Conference of Principals and Superintendents of American Institutions for the Education of the Deaf will meet at the Colorado School for the Deaf and the Blind, Colorado Springs, on Saturday, July 9, at two o'clock P. M. The Standing Executive Committee have decided to limit invitations to the Conference to the principals and superintendents of schools as regular members, and to members of boards of trust, state officers, ex-superintendents and ex-principals of schools, and such others as may be invited by the Local Committee, as honorary members.

Mr. John E. Ray, Superintendent of the Colorado School, has been appointed Local Committee, and the Board of Management of the School extends a cordial welcome to the Conference.

It was hoped that before this date definite announcement might be made as to rates of travel to Colorado, but answers have not yet been received from all the railroad managers whom it was necessary to consult. There is a good prospect of very favorable rates, and a special circular will be issued as soon as a conclusion is reached.

All persons intending to present papers to the Conference, or subjects for discussion, are earnestly requested to communicate with the Local Committee at an early day.

By order of the Standing Executive Committee.

E. M. GALLAUDET,

Chairman.

THE SECOND SUMMER MEETING OF THE AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF.

ROCHESTER, N. Y., *March* 17, 1892.

At a meeting of the Board of Directors of the American Association to Promote the Teaching of Speech to the Deaf, held at Washington, D. C., January 18, it was decided to hold the Annual Summer Meeting either at Manitou, Colorado, Lake George, N. Y., or Northampton, Mass., and Mr. A. L. E. Crouter was appointed a committee to ascertain the relative advantages of these points as to rates of transportation, hotel accommodations, etc.

Mr. Crouter made due inquiry and reported fully to a meeting of the Executive Committee held at the Parker House, Boston, Mass., March 16, and, in consequence, the Committee, while duly appreciating the desirability of meeting in Colorado in conjunction with the Conference of Superintendents and Principals, felt constrained to call the meeting for June 22 to July 1, inclusive, at Crosbyside Hotel, Lake George, N. Y., which date will in nowise conflict with the proposed Conference in Colorado.

Members of the Association will be duly notified by the Secretary of rates of hotel accommodations, which it is believed will be as liberal as those of last year; of routes and rates of railway travel, and of the names of the distinguished lecturers and teachers whose services the Executive Committee hope to obtain. The programme, as far as it has been completed, promises to be richer and more extensive than that presented at the opening meeting in July last, and it is hoped the attendance will be correspondingly greater.

ALEXANDER GRAHAM BELL,
A. L. E. CROUTER,
GARDINER G. HUBBARD,
DAVID GREENBERGER,
CAROLINE A. YALE,
Z. F. WESTERVELT,

Executive Committee.

SCHOOL ITEMS.

Alabama Institute.—Mr. Alfred F. Wood, formerly principal of the Cincinnati Day-School, and more recently of the Toledo School, has been appointed teacher in the Colored Department.

Albany Home School.—The State law relating to the education of deaf children under twelve years of age has been so amended as to allow of the admission of county pupils to the various schools for the deaf at the age of five years, six having heretofore been the limit. The new law also designates this School as one of those to which county pupils may be thus admitted, and extends the provision to "any institution in the State, for the education of deaf-mutes, as to which the Board of State Charities shall have made and filed with the Superintendent of Public Instruction a certificate to the effect that said institution has been duly organized and is prepared for the reception and instruction of such pupils."

Miss Black expects to remove the School to Pine Hills, a suburb of Albany, for a wider range, and to open a kindergarten for a class of the neighborhood hearing children, and also for the benefit of the deaf children.

Arkansas Institute.—The Woman's Building at the World's Columbian Exposition is to have a specimen panel of wood from each State, carved by women. The work for Arkansas has been assigned to the art class of this school.

Buenos Ayres Institution.—Mr. Luigi Molfino, for the past twenty years instructor in the Provincial Institution at Milan, has been appointed director of the National Institution at Buenos Ayres. Mr. Molfino has accepted the position for a year on trial, his place in the Milan Institution being kept open for him if he desires to return at the end of that period. Mr. Molfino was one of the editors of *Il Sordomuto*; in this position he is succeeded by his brother, Mr. Enrico Molfino, who is a teacher in the same school.

Dresden Institution.—Mr. George Gilpin, a director of the Pennsylvania Institution, who is now in Europe visiting schools for the deaf, is writing an interesting series of

letters to Mr. Crouter. One describing his visit to the Preparatory School of the Dresden Institution is published in the *Silent World* of March 3, 1892. This School is separate from the parent Institution, having its own resident superintendent, but is under the general direction of the principal of the older school. The children are admitted as young as six years, and are kept two years or longer before being transferred to the higher school.

For several months after their admission [says Mr. Gilpin] they are taught no articulation. During this time, which is principally devoted to improving their physical condition, to giving them habits of order and discipline, and to developing their thinking power by the usual kindergarten methods, the instruction is entirely by signs. Indeed, one of the things which seems most strange here, in the very country which has given its name to the oral system, and where there are none other than oral schools for the deaf, is the free use of signs. They do not seem to have the terror for teachers here that they have in America.

I remarked to the superintendent that in oral schools with us signs were prohibited. He at once asked me how it was possible to teach beginners without signs. I was then, of course, driven to the familiar explanation of natural as distinguished from conventional signs. But I am afraid this did not impress him greatly. He did not seem to think there was much difference in the morality of making the signs for "yes" or "no," "come here" or "go away," or the signs for a "man," a "house," or a "tree."

After the instruction in articulation had been begun, also, Mr. Gilpin found the pupils in the class-rooms, when repeating orally the word spoken by the teacher, "usually making the sign to show that they understood it."

In the *Silent World* for March 24 Mr. Gilpin describes his visit to the parent Institution. He commends the results in articulation and lip-reading, especially in the younger classes, but considers the general attainments of the pupils, as in other German schools he has visited, far inferior to those of the pupils in American schools. In the "A" division of the highest class, containing six pupils, the teacher asked the following questions in geography:

1. What is America?
2. What ocean is east of America?
3. What ocean is west of America?
4. What is the largest river in North America?
5. What is the largest river in South America?

Only one pupil answered the first question, and all he could

... answered the sec-
... and: only one answered
... gave any replies at all,
... throughout. The answers
... satisfactory.

... room of the best periodi-
... general plan of self-sup-
... was opened on the 12th

... American Schools in the 1
... a transposition of figures, 1
... this Institution on the first
... given as 570. It should be

... Stout has been compelled by
... as teacher.

... A. A. Hendershot, a valued teach-
... in this school, has resigned h-
... applied temporarily by Miss A.

... a system of scientific instruction
... Hon. R. A. Mott, secretary of t
... been introduced. The plan includ-
... competent persons outside the re-
... and the introductory lecture w-
... himself on the 16th of February la-
... departure and an outline of the pr-
... the following report, presented
... unanimously approved by the Board as

... Directors: I respectfully invite the attention
... Superintendent to the following scheme for
... work in the School for the Deaf which I be-
... explanation
... percentage of the pupils of this school will i-
... and that, if encouraged by proper tra-
... increased, and I am strongly of the opini-
... this tendency for at least two reasons:
... raising in this country is to grow in relat-

Second. The peculiar disadvantages of the deaf are not so great in that calling as in most others.

If this be true, the question is of practical importance whether we cannot do something in this School which may interest our young people and materially help them in their work. Many of them acquire something of practical methods during their vacations at home, but for obvious reasons this training must be very defective, for: First, a large share of western farmers are poor farmers and poorer teachers. Second, means of communication are very difficult; and, Third, we have the pupils here most of the time for about eight years, during the time when they are most apt to learn the habits of plants, trees, and animals.

In outlining a plan of this work, please notice that I make this department as much a school as any other. I would not enter the pupils as farm laborers proper. I think at first I would confine the experiment to the last two years of the course, except in special cases.

OUTLINE OF THE PLAN.

Have class-room talks, with plenty of black-board illustrations, during the months of September and October in the autumn, and March, April, and May in the spring, two or three times a week, on the following named and kindred topics:

The selection of seeds, how to raise, gather, and protect them—including seeds for both farm and garden, and both seeds proper and bulbous roots. When and how to plant, or sow; amount of seed per acre; distances of plants apart.

The varieties of corn, wheat, oats, barley, potatoes, and other roots and grasses most likely to succeed, and adaptation of seasons and soils.

Plowing deep or shallow, and for what crops to plow in the fall and what in the spring, and why.

The importance of keeping the land free from thistles, quack-grass, wild mustard, and all noxious weeds. Estimate the area of land that a lusty pigweed or pursley plant will seed.

Show the importance of fertilizers, and what kinds, and how and when to apply them.

During spring and autumn work on the farm and garden, detail these classes to the fields. Let them learn the use of tools, how to select them, and how to keep them bright and ready for use. Be sure to impress them with the fact that the best farms and utensils are those that are paid for.

HORTICULTURE AND SMALL FRUITS.

This branch of the work involves poetry, pleasure, profit, and luxury, and ought to be cultivated zealously. It generally reveals the opposite. Look at the rows of stunted, sickly, grass-bound currant and gooseberry bushes in the average farmer's garden. The spindling raspberry cane, the strawberry bed smothered with weeds and grass, and the larger fruits, apples, plums, etc., dying and forlorn. Ignorance is stamped upon every stage of their existence.

I think our pupils may be taught what varieties to select, and the kind of plants of each approved variety; how and when to plant, cultivate, and care for them. Teach them the theory of polarization and proper

protection and fertilization. Give them thorough instruction and drill in both root and top grafting and budding.

An important branch of the work may be the raising and training of domestic animals, especially horses and cows, with lessons on raising and marketing poultry and its produce: raising and management of bees, etc., etc. On most of these things, I think, we can secure talks from experts in our own community.

GIRLS' DEPARTMENT.

So soon as may be, open a school for instruction and thorough drill of the girls in all kinds of common cooking and general housework. I am not competent to suggest any detailed plan of this work: I only bring it to your notice as a matter of prime importance.

I will only add that I am sure that some plan similar to the one I have outlined would not only greatly benefit our pupils, but also prove a source of personal pleasure to them, and would in no measure retard progress in any other branch, but rather stimulate it.

The Hon. Horace E. Barron, who has been a director of the Institution for twenty-six years, filling the offices of treasurer, vice-president, president, steward, and superintendent of construction, died suddenly of heart failure on the 26th of February last. In recognition of his long and faithful services the new building now in process of erection will be called "Barron Hall."

The *Chicago Century* of November 14, 1891, and *Frank Leslie's Illustrated Weekly* of February 13, 1892, contain illustrated articles descriptive of the School.

National College.—At a meeting of the Executive Committee of the Convention of American Instructors of the Deaf held at Kendall Green, Washington, D. C., in January last, President Gallaudet made a statement of the "new departure" in the College work, substantially the same as that given by Professor Gordon in the present number of the *Annals*. The members of the Committee also had considerable opportunity to examine for themselves the work of the department. The following resolution was unanimously adopted by the Committee:

Resolved, That we have heard with pleasure a report of the plans and of the work being done at the College in the way of training educated hearing young men and women for the work of teaching the deaf, and cheerfully commend the efforts made in that direction, and express the hope that this work may be continued.

Ontario Institution.—Miss Mathison, who has taught artic-

ulation for several years, has resigned, desiring a rest, and is succeeded by Miss Margery Curlette, who was trained by Miss Garrett and took an observative and practical course at the Illinois Institution. Miss Nathalie L'Herault, a monitor teacher, has resigned in order to take care of an invalid sister, and is succeeded by Miss Carrie Coleman, a daughter of Mr. D. R. Coleman. Another teacher, Miss M. M. Ostrom, on account of ill health, has been granted leave of absence till the beginning of the next year. Mr. R. O'Meara, who had passed the examination for a teacher in common schools, and is familiar with the sign-language, has been appointed temporary teacher of a primary class with certain supervisory duties.

Instruction in printing has been introduced, and an office has been equipped with all the material necessary for making thorough practical printers. The publication of an eight-page handsomely-printed and well-edited monthly periodical called the *Canadian Mute* was begun on the 15th of February last, and is continued under the competent direction of Mr. J. B. Ashley.

Pennsylvania Home.—"The Home for the Training in Speech of Deaf Children before they are of School Age" was opened on the first of February last with fourteen pupils. Residents of Pennsylvania are admitted free. The school is in Philadelphia county, but in a country district. For further particulars address the principal, Miss Emma Garrett, Home for the Training in Speech, etc., Monument Avenue, near Ford road, Philadelphia.

Pennsylvania Oral School.—The "Slojd" method of manual training has been substituted for the former plan of teaching carpentry.

Texas School.—Mr. Harris Taylor has assumed the editorial management of the *Juvenile Ranger*.

Miss Warren's School.—We are informed that Miss Lillie E. Warren has a small private school at 243 West Twenty-first street, New York city.

Western New York Institution.—Mr. George L. Taft, a graduate of Boston University, who has taught here for five years, has entered Harvard Dental College. Miss M. E. Love-

less, a Wellesley College graduate, after teaching at Rochester for six years, has entered the University of Michigan and is taking a special course in English literature. Miss Hart, last year supervisor of the older girls, has accepted a position as teacher in the Florida School. To fill the positions made vacant in the corps of instruction, Miss A. B. Hopeman, a graduate of the Rochester Free Academy and of its normal training department, and Miss C. E. Christian, a graduate and for several years assistant instructor at the Granger Place Seminary at Canandaigua, have been employed. Miss Carolyn H. Talcott, for twelve years an officer of the school, is absent for a year's sojourn in England.

During last summer clocks and wires constituting a uniform electric time system were put up throughout the buildings. Mr. Westervelt writes that this improvement, while inexpensive, is of great advantage to the school. The regulator keeps itself automatically wound by an electrical arrangement within itself, and communicates the correct time by minutes to secondary dials, of which twenty-six are placed in the principal rooms occupied by the pupils. "The Warner Time System," under which name the clocks in use were patented, is now owned and operated by the Western Union Telegraph Company.

E. A. F.

MISCELLANEOUS.

The Photography of Speech.—Mr. Ad. Bélanger gives in the *Revue Française* for November and December, 1891, an account of the attempts to photograph speech, of which some mention has recently been made in the newspapers.

The idea originated with Messrs. Marichelle and Jacquenod, instructors in the National Institution at Paris, and was suggested by the success attained in photographing the movements of men and animals in locomotion. The photographs were made by Mr. George Demeny, who is at the head of the laboratory of the Physiological Station.

The photochronographic apparatus used gave sixteen pictures a second, the time of exposure for each picture being from $\frac{1}{800}$ to $\frac{1}{1000}$ of a second. The solar light was concentrated upon the face of the subject by the aid of two mirrors. In order to obtain pictures of a sufficient size it was necessary to place the instrument near the subject who was speaking.

The latter spoke more slowly and more distinctly than in ordinary speech.

When the pictures were placed in a zoötrope and the instrument was turned, the mouth was seen to open in a certain fashion and the lips to move, and a deaf-mute placed in front could read part of the sentence, *je vous aime*, which had been photographed.

Twenty-four pictures were taken. They were not perfect, the tongue especially not being properly photographed.

Mr. Demeny expresses the hope that, by carrying these experiments further and obtaining more accurate pictures, it will be possible to use them in teaching speech. Mr. Bélanger thinks they may be serviceable in comparing the ways in which different persons pronounce the same sentence, but rightly says that in teaching speech to the deaf nothing can supply the place of the mouth of the living instructor.

The Use of Story-Books.—The *Silent Worker* of February 25 describes the way in which story-books are used in the New Jersey School, as follows:

We take such tales as "The Three Bears," "Jack and the Bean Stalk," and so on up to "Aladdin" and "Rip Van Winkle." McLoughlin, of New York, publishes almost everything in the story line in a cheap and attractive form. The teacher is provided with two or three copies of the story to be used, printed in large type, and with striking illustrations in colors. One of these copies is cut up and the pictures are pinned to the wall in plain sight. The teacher begins by pointing out the persons in the first picture and telling what they are doing. Then these persons are followed through the set of pictures and a brief outline of the story is given, the main statements being written on the black-board. The story is then gone over at more length, details being introduced judiciously, as the curiosity of the children may demand. This is mostly done by finger spelling. The questioning as to the points shown in the picture makes an excellent ground-work for articulation practice. By this time the un mutilated copies of the story are in demand, and are given out from time to time to fill up the spare minutes of the pupils who get their lessons finished first. Each story is a portion of the year's work, and the class are examined on it by the Superintendent, who questions them without reference to the text of the book or to the questions prepared and used by the teacher. The pupils are required to write out the gist of the story, each one to fill a large slate. We are bound to say that many pretty bright pupils show themselves regular Chinese artists in their lack of appreciation of perspective. But this work does enlist the children's interest, and gives them much excellent practice in language.

The Michigan Annual Census.—In the *Mentor* for October, 1891, Mr. A. M. Shotwell, of Concord, Michigan, describes the Michigan system by which an annual census is taken of the deaf, the blind, and other special classes. The law is as follows:

SECTION 1. It shall be the duty of the supervisor or assessor of each township and ward in this State, at the time of making his general assessment and assessment-roll for his township or ward in each year, to ascertain and set down in a blank prepared for that purpose the names of all insane, deaf and dumb, dumb, blind, epileptic, and idiotic persons in his township or ward, showing the person's age, general health, habits, and occupation: the kind, degree, and duration of such affliction; the sex; whether married or single or widowed; the time under medical treatment: the pecuniary ability of the person thus afflicted and of the relatives of such person liable for his or her support: whether supported wholly or in part by the public, and such further information relative to these classes of persons as may be thought useful. Such supervisor or assessor shall deliver said blank to the county clerk of his county on or before the first day of June, and the county clerk shall forthwith transmit said blank to the Secretary of State, who shall present an abstract of the information thus obtained to the Governor on the thirtieth day of September, or as soon as practicable thereafter.

SEC. 2. The Secretary of State shall, as soon as practicable after the passage of this act, transmit to each county clerk of this State a sufficient number of copies of this act to furnish each supervisor or assessor of his county with one: also, a sufficient number of blanks to be prepared by him, to be used in carrying out the provisions of this act. The county clerk of each county shall, on receiving the same, immediately distribute said copies and blanks to the supervisors or assessors of his county. The Secretary shall each year thereafter, before the first day of April, transmit to each county clerk a sufficient number of blanks to be distributed by such clerk to the supervisors or assessors of his county, to be used in carrying out the provisions of this act.

The organic law of the Michigan School for the Blind provides as follows:

SECTION 22. It shall be the duty of the Secretary of State to make and forward to the superintendent of the Michigan School for the Blind, on or before the first day of November of each year, on blanks prepared for that purpose, a copy in detail of so much of the statistical information received by him by virtue of any law of this State as relates to the blind.

A similar law provides that the statistical information relating to the deaf shall be forwarded to the superintendent of the School for the Deaf.

Mr. Shotwell says that while the decennial censuses, State and national, have shown the information gathered by this

method to be incomplete as to the total number of the blind, deaf, feeble-minded, etc., in the State, yet its specific character, its ready accessibility, and its approximate completeness as to the individuals reported, are such as to render its indications instructive and useful.

In response to an inquiry as to the value of the annual statistics forwarded to the superintendent of the School for the Deaf, Mr. Gass writes us :

I do *not* find the annual statistics of very great value, because they are inaccurate and misleading. Very many who are feeble-minded or idiotic are reported in the census returns as deaf and dumb, and this has been the means of getting some of this class into our own school. I have never found such records correct, yet I think them of some value as indicating the number of deaf, *plus* the feeble-minded, included in the list.

Fraction Discs.—In an article on the “Teaching of Arithmetic,” published in the last number of the *Annals* (pp. 9–14), Mr. Weston Jenkins, superintendent of the New Jersey School, suggested that the manufacturers of kindergarten material might well make discs showing fractional parts of their area by different colors. It is stated in the *Silent Worker* of February 25 that exactly such a device has been prepared in pasteboard by Milton Bradley, a well-known manufacturer of kindergarten material.

The Next Convention.—The last Convention of American Instructors of the Deaf voted that the next Convention should be held in or near Chicago during the summer of 1893. At a meeting of the Executive Committee held at Kendall Green, Washington, D. C., in January last, the following resolution was unanimously adopted :

Resolved, That in the judgment of this Committee it will be wise for the Thirteenth Convention of American Instructors of the Deaf in 1893 to be held in connection with an Ecumenical Congress of Teachers of the Deaf, under the auspices and in accordance with the invitation of the World's Congress Auxiliary of the World's Columbian Exposition.*

Dr. Gillett and Dr. Noyes were appointed a sub-committee to make the necessary preliminary arrangements for the Convention.

* See the last number of the *Annals*, pp. 43–48. It is probable that the annual summer meeting of the Association to Promote the Teaching of Speech to the Deaf will also be held at Chicago in 1893, under the auspices of the same organization.

The special committee appointed at the New York Convention to arrange the literary programme of the next Convention, of which Dr. Noyes is chairman, have already made considerable progress in their work. Any suggestions on this subject should be addressed to Dr. J. L. Noyes, Superintendent of the Minnesota School for the Deaf, Faribault, Minnesota.

The World's Columbian Exhibition.—The Executive Committee of the Convention of American Instructors of the Deaf, through Dr. Gillett and Dr. Noyes, sub-committee, have arranged for the exhibition of material from schools for the deaf in the Department of Liberal Arts, which is under the charge of Dr. Peabody. By an ingenious arrangement of the space in this department it will be possible to group the material with reference at once to the State from which it comes and the class to which it belongs, so that it may be examined in either connection. Full particulars of the plan will be given to the heads of schools at the Colorado Conference of Principals next July.

Second Italian Congress.—Mr. G. Ferreri, Vice-Director of the Pendola Institution, Siena, and editor of the periodical *L'Educazione*, etc., sends the following statement of the subjects to be discussed in the Second Congress of Italian Instructors of the Deaf, which is to be held early in September of the present year. The First Congress was held in 1873, under the presidency of the Rev. Father Pendola:

1. The need of extending to all the deaf the benefit of instruction, the duty appertaining to the Government in regard thereto, and the way to attain the desired end.

2. Whether a day-school can suffice for the instruction of the deaf, and on what basis it should be established.

3. Taking into account the experiences and studies made by the Milan Congress, what precautions are advised the better to attain the object, namely, the oral method, in conformity with the votes given at that Congress.

4. The necessity of special studies and of sufficient practice to become a good instructor of the deaf; how to compass this end.

5. How to apply the two fundamental principles of our school: *a*, Uniformity of instruction; *b*, Gradual, and finally absolute, exclusion of signs.

6. How to provide for the deaf who, from a deficiency of understanding or from some other physical or natural defect, cannot follow the usual course of instruction.

7. What professions or trades are best suited to the deaf, taking into consideration their social positions and aptitudes.

8. Drawing being accepted as the basis of the industrial instruction, how it can be made co-ordinate and for practical purposes suitable to the profession or trade of each separate pupil.

9. How to provide for the deaf, and especially for the female deaf, on the termination of their course of instruction.

10. Of the desirability of there being medical specialists to examine the ears, eyes, and vocal organs, and to treat the same.

11. The benefit of pedagogical and didactical conferences, and of the ways and means of establishing them amongst instructors of the deaf.

12. How to obtain the most accurate statistics of the deaf in Italy.

A Petition to the German Emperor.—The *Blätter für Taubstummenebildung* of December 15, 1891, publishes the following petition to the Emperor of Germany,* which has been signed by more than 800 deaf-mutes:

Most Serene and Mighty Emperor and King, Most Gracious Emperor, King and Lord! Even your most humble subjects, the undersigned, to whom nature has denied with the sense of hearing the precious gift of speech, are not ignorant of the paternal efforts of your Imperial and Royal Majesty to give to the system of education in Germany a form more suitable and more in accordance with the spirit of the age. Assured that your Majesty has at heart the welfare of the lowest of the nation, and that your ear is open to the prayers and desires even of an unfortunate class of humanity neglected by nature, we, your most humble subjects, beg your Majesty graciously to hear us.

For a number of years most deaf-mutes in nearly all civilized countries have been in the fortunate position to enjoy the blessings of school instruction and systematic education. As in all departments of humanity, Germany has ever taken a commanding position in the education of the deaf; but this position seems to be endangered by the repellant attitude maintained by German instructors of the deaf in the conflict of methods which has continued for over a hundred years, and which of late has become more and more momentous for the German deaf-mute.

To impart education and culture to the deaf, and to make them useful members of human society, they must be instructed in all the knowledge and skill which the common school affords its pupils. While foreign teachers of the deaf, to accomplish this purpose, use, besides articulation, the sign-language and writing as a means of communication and instruction, the whole effort of the German instructor is directed to making the dumb speak, and to driving out from the instruction and the institutions, by application of the severest means of discipline, the sign-language which is peculiar to the deaf. German teachers declare it possible for the deaf to acquire the speech of the hearing, to read the spoken word from the mouth of the speaker, and thus, by means of speech, to communicate with hearing persons. Misled by exceptional results, which are reached with such pupils as are only hard of hearing, or such as heard and

*Translated from the German by PAUL LANGER, a student of the National Deaf-Mute College, Washington, D. C.

spoke in childhood and later lost their hearing. German teachers of the deaf persist in their endeavor, and employ the oral method with all pupils, without making a distinction between the real and unreal deaf-mutes, regardless of the fact that by this unnatural method of instruction the intellect of many of their pupils is enfeebled and wasted.

Instead of cultivating the sign-language bestowed upon the deaf-mute by nature, and with its help enlarging his mind with all kinds of useful knowledge, German teachers lay the chief stress on mechanical drill in speech for the attainment of articulation, though the great majority of their pupils, even with the most painful efforts, do not even approach the desired end. Victims of a false principle, hundreds of pupils every year leave the German institutions, lacking not only in the most necessary branches of knowledge, but also in means of communication. Their artificially acquired articulation is rarely understood by hearing persons, and as they do not acquire sufficient command of written language, and their sign-language is suppressed by the most rigorous means, communication between the younger deaf-mutes and their older companions in adversity is rendered difficult. Your most humble petitioners feel that it is an encroachment on their natural rights, and a great hindrance to their success in life, when that language which alone is adapted to their nature is forcibly taken from them. Daily and hourly adult deaf-mutes have the opportunity to convince themselves of the inadequacy of the artificially-acquired articulation, and of the indispensableness and usefulness of the sign-language; moreover, the results of the American schools for the deaf, in which the combined system is practised with the greatest success, contradict the assertion of the German teachers that the sign-language cannot be reconciled with the oral method.

Though the deaf capable of judging have at all times emphatically urged the retention and introduction of a uniform sign-language, and though Instructor Heidsiek, of Breslau, has recently, on a psychological basis, conclusively shown the unnaturalness and unsuitableness of the method of instruction used in the German institutions at the present time, the sad lot of the deaf does not seem to be improved. Their petition to his Excellency, the former Minister of Public Instruction, Dr. Von Gossler, for the introduction of the combined system, was unfavorably received. In the exercise, as they believe, of their rights, your most humble subjects, the undersigned, driven by necessity, now venture confidently to bring their petition to the steps of the throne, and most humbly beg your Imperial and Royal Majesty graciously to order that the question of teaching the deaf be again considered, and that, besides articulation, the sign-language be introduced into their instruction. Your Majesty's deaf-mute petitioners humbly trust that you will graciously hear their prayer.

Church Work.—Through the efforts of the Rev. A. W. Manna a church building has been obtained for the Episcopalian deaf of Chicago, and it is hoped that services will be held as often as every other Sunday. The building is on State street, near Twentieth. Heretofore it has been known as "The

Church of St. Clement," but hereafter it is to be called "All Angels' Mission to Deaf Mutes."

The First Annual Report of the Church Mission in the Dioceses of Central and Western New York has recently been published. This mission is under the charge of the Rev. C. Orvis Dantzer, a graduate of the Indiana Institution and National College, who was ordained deacon by Bishop Huntington on the 10th of March last, the Rev. Dr. Thomas Gallaudet preaching the sermon. Mr. Dantzer's present address is 706 Harrison street, Syracuse, N. Y.

The Rev. Anson T. Colt, who was Dr. Gallaudet's assistant at St. Ann's Church, New York, for seven years, now conducts a service for the deaf every Sunday afternoon at 218 Wyckoff avenue, Brooklyn.

De l'Épée's Birthday.—Mr. J. Théobald has published a pamphlet giving a report of the proceedings at the Anniversary Banquet held in Paris on the birthday of the Abbé de l'Épée, November 29, 1891. Dr. Wilkinson, Principal of the California Institution, had been requested to preside on this occasion. Being unable to be present, he expressed his homage for the Abbé de l'Épée in an eloquent letter. Mr. Douglas Tilden presided, and addresses were made by Mr. Tilden, Mr. Théophile Denis, and others.

Publications of the Volta Bureau.—The Volta Bureau has reprinted from the *Annals* for October last Miss Estella V. Sutton's paper on the Toy Object Method, revised and supplemented by the author. It has also published the Address by President Gallaudet delivered at Glasgow before the British Deaf and Dumb Association in August last, revised and corrected by the author, and—in beautiful style, but inconvenient form, owing to the *fac-simile* reproduction of letters—Miss Fuller's account of how Helen Keller learned to speak, accompanied by a portrait of Helen. This last-named publication is a "Souvenir of the First Summer Meeting of the American Association to Promote the Teaching of Speech to the Deaf." A second edition of it is now in the press, containing some additional matter by Miss Sullivan, Helen's teacher, which, by the kind permission of the Bureau, is printed in the present number of the *Annals*. Another work about to be published by the Bureau is "Education of Deaf Children," containing

the evidence of President Gallaudet and Dr. Bell, with accompanying papers, presented to the Royal Commission of Great Britain, edited by Professor J. C. Gordon.

Reports of Schools.—We have received since the last issue of the *Annals* the reports of the Clarke, Columbia, Maryland, New Jersey, Ontario, Pennsylvania, Rotterdam, South Australian, and Texas Institutions, published in 1891, and the report of the Bristol and Halifax Schools and the Announcement of the National College, published in 1892.

E. A. F.

ADVERTISEMENT.

ORAL TRAINING SCHOOL FOR TEACHERS OF THE DEAF, established in 1881. Course of Training in Bell's mechanism of speech; in methods of instruction employed in European and American oral schools, together with some original thoughts of Miss Garrett's in articulation, lip-reading, and language work. Instruction given in Bell symbols to any teachers desiring a knowledge of them, though Miss Garrett does not consider these an essential part of the valuable Bell system. Address Miss EMMA GARRETT, *Home for the Training in Speech of Deaf Children before they are of School Age, Monument Avenue, near Ford road, Philadelphia.*

AMERICAN ANNALS OF THE DEAF.

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SOME REASONS FOR TEACHING HISTORY.

AN able and successful teacher in one of our prominent schools for the deaf has recently made remarks substantially as follows :

I do not believe it is wise to spend very much time in teaching history to the pupils with whom we are dealing. Of course I would have them tolerably familiar with the history of our own country. I would also give them an outline of English history, but not much more. The education of our children should be more practical : it should be based upon the things around them. Let them study physics, botany, and natural history. Let them learn something of the life of living things instead of burdening their memories with the details of the lives of people who died a thousand years ago.

Much more was said to the same effect, but this is enough to show the main idea, namely, that, generally speaking, greater benefit is to be derived in the education of the deaf from the study of natural science than from the study of history.

This opinion, coming from such a source, naturally leads one who takes an opposite view to examine his reasons for the faith that is in him, to see if perchance his energies have heretofore been misdirected and his labor largely thrown away.

It goes without saying that in the early stages of education a child must learn about the things he sees. His own body ; different animals and their habits ; plants and their growth ; the air ; clouds ; the sun, moon, and stars, furnish subject-matter which no intelligent teacher will fail to use in giving a vast amount of instruction. Then geography, taught as it should be, will make large additions to the learner's store in many natural sciences. We may assume that by the time a child is tolerably familiar with the history of our own country and has an outline of English history, he has also acquired, un-

der the training of any judicious teacher, a considerable knowledge of the elements of science in many departments. This being taken for granted, the question becomes, Shall the pupil go on working exclusively in that line, or, without wholly abandoning it, shall a good part of his time in the last year or two of his school course be devoted to the history of the old world, and of mediæval and modern nations other than England and the United States?

The answer to this question depends upon the answer to the other one, What do we teach anything *for*? In reply to this we sometimes say that the ultimate end to which we aspire for the young people under our charge is an acquaintance with the English language. Most of us, probably all, admit that the facts which we give our pupils are of minor importance compared with a comprehension of the words in which those facts are stated. If, then, we are pre-eminently teachers of language, what other study opens to us such possibilities as does history? Every science has a vocabulary of its own, which must be partially mastered if one goes on beyond the elementary work just mentioned, and this vocabulary is not of equal importance in any other field. History, on the contrary, uses the language of every-day life. With the small exception of proper names—and an acquaintance with the great names of history is surely as essential to what is commonly called a decent education as an acquaintance with technical scientific terms—the words and phrases in which she tells her tale are those of the newspapers, of common books, and of conversation. A student of history must learn more or less of the language employed in speaking of different ages and races, of lost arts and dead languages and ancient civilizations, of the rise, development, and overthrow of government and religion, of explorations and military expeditions, of sculpture, architecture, social customs and domestic life, and of the motives hidden in the heart of man by which his actions are controlled. It is safe to say that no science demands such an extensive and valuable vocabulary.

Again, is it not true that a taste for history will be much more apt than a taste for natural science to result in a habit of reading after our pupils leave school? Perhaps we are at fault here, but it seems to us that the historical literature which is within their mental grasp is vastly greater in quantity and of a much higher quality than the scientific, and that once hav-

ing become interested in the kings and heroes, sages and saints,

Whose distant footsteps echo
Through the corridors of Time,

they will be much more likely to find books which will lure them on to know more of these worthies than they will to find anything which is at the same time both intelligible and improving in the domain of science. If this is a fact, we shall be wise to cut our coat according to our cloth.

But, indeed, when we say that the final cause of a teacher of the deaf, his *raison d'être*, is to teach language and establish habits of reading useful books, we certainly do not mean it. All this is but a means to the real end which we have before us, the making of manly men and womanly women. We should all agree that one of the elements of a noble disposition in a man or woman is the ability and the willingness to see things fairly, the inclination to suspend judgment until one is sure he is in possession of the facts in the case. This spirit is not common in children. Its development comes with the years, but we know how much more slowly it comes to deaf children than to those who hear the endless discussion of motives which goes on among their elders. The great difficulty that our pupils experience in seeing both sides of a question is the cause of one of the obstacles we meet in teaching history. They are usually blind partisans. Macaulay's fashion of deifying his friends and—if one may venture to avail himself of the rarely-used word—of *diabolizing* his foes is in exact accordance with their tastes, only they would like it a thousand times “more so,” and, unlike the great historian, they do not deem it necessary to call into the court witnesses who can give testimony on either side. How the man who conducted the merciless siege of Jerusalem could be “The Delight of Mankind” passes their conception. After you have told them that the Emperor Marcus Aurelius was a persecutor of the Christians, it is well-nigh impossible for them to believe that he was one of those rare souls of whom the world was not worthy. The sanction which Queen Isabella gave to the establishment of the Inquisition is as damning a spot on her fame as it would be on Queen Victoria's should she do the same thing to-day. Now, it seems to us that history, and history alone of all the studies pursued in our schools, offers an opportunity for the direct cultivation of a catholic spirit, for fostering a habit of “put-

ting yourself in his place" to see if there may not be some excuse for actions at first sight wholly indefensible. While we do not expect to bring about sudden changes in character by this means or any other, we do believe that no other study has such a tendency to overcome the habit of pronouncing unjust judgments based upon narrow and prejudiced views of things. A teacher so constantly meets his pupils' hasty strictures with, "But you do not know yet *why* he did it. Wait till I tell you how it seemed to him;" and they so often change their opinions with further knowledge, that they gradually grow to see the childishness of deciding upon a matter the moment a few of its features are presented to their view.

The study of history not only increases one's ability to entertain apparently conflicting ideas, but the ideas themselves which she presents, considered as food for the mind from which we may justly expect intellectual growth, are at least of equal value with the ideas offered by science. And it is not difficult—in fact, it is the easiest thing in the world—to interest our children in much besides the petty details of history, to make them feel that men and women who died thousands of years ago are factors in our lives to-day. As they stand in imagination on the battle-field of Marathon, they can be made to realize that the hope of the world was once in awful peril there, and they rejoice as we do that Hellenic civilization was spared to be the glory not of Greece only, but of all coming nations. They will be interested in theories, too, whether the teacher gives this as an illustration of the law of the survival of the fittest, which governs all existence, or whether he finds in it a proof that God himself still watches over and cares for the world that He made. In Roman history, it is not the marvelous stories of Romulus and the wolf, of the mystic Sibyl and her wonderful books, and of the great twin brethren at Lake Regillus, that are most absorbing. Boys and girls of ordinary intelligence soon take these at their true value, feeling their poetic charm but acknowledging their historic worthlessness. Their real sympathies are brought out rather by the long-continued patrician oppressions, and their sense of justice is finally satisfied by the hard-won victory of the plebeians; or they look on in wonder at the matchless spectacle of Rome conquering the world, and are impressed with the transitory nature of earthly things as they see her mighty power crumbled in the dust. Their hearts are stirred no less than our own by the life

and death struggle between liberty and despotism which was fought out on the little triangle between France, Germany, and the sea. They listen as to a fairy tale—or rather as to a tale of the avenging Fates—to the long record of injustice, selfishness, lavish extravagance, and shameless immorality on the one hand, and of ignorance, brutality, and starvation on the other, which culminated in the horrors of the French Revolution; and comparing this with other revolutions of which they know something, they see the sure working of the law of cause and effect. As they learn of the political and social changes which have followed these outbreaks, they see the truth of Victor Hugo's saying, "The brutalities of progress are called revolutions, but when they are over this fact is recognized—the human race has been chastised, but it has moved onward."

But the question has another aspect. Hawthorne has said that it is a pitiful thing that any soul should leave this world without having once seen an antique painted window with the bright Italian sunshine glowing through it. It is another pitiful thing that so many mortals walk the dull earth without seeing how human existence has been irradiated by the divine glory which has emanated from god-like souls. History is the vestal virgin whose sacred office it has been to keep this light shining before men, and she has faithfully performed her duty. She has nothing better for us than the illumination and inspiration which we get from noble lives, and this influence is one to which children are especially susceptible. One of the fragmentary sentences found after his death among the papers of that subtle thinker, Joubert, was this: "Children have more need of models than of critics;" a remark hardly calculated to contribute to our peace of mind as teachers. It is some comfort, however, that history shows them men and women by scores to whose actions we may point and say, Go and do thou likewise. It was a very striking figure, that of the prisoner in the court-room and convict in the little cell in Athens, who, more than two thousand years ago, uttered some truths in words which so touched the heart of man that he has been saying them over and over to himself from that time till this. He is not likely ever to forget, "A man who is good for anything ought not to calculate the chance of living or dying; he ought only to consider whether, in doing anything, he is doing right or wrong, acting the part of a good man or of a bad. For wherever a man's place is, whether the place which

he has chosen or that in which he has been placed by a commander, there he ought to remain in the hour of danger; he should not think of death nor of anything but disgrace. And this, O men of Athens, is a true saying." The same lesson with different illustrations was taught in another age and nation, beside the death-beds where saintly, Christ-like John Tauler administered the last sacraments, undaunted by the dreaded pestilence and the still more dreaded ban of excommunication. It has been repeated again and again, in every language under heaven—the lesson that discomfort, pain, and death are not the greatest evils, and that the greatest good consists in utter unselfishness and in heroic devotion to truth and duty. For its direct, practical bearing on the lives of our boys and girls, is this lesson equalled by anything which will be taught them in the museum or the laboratory? Do we say that this teaching belongs to the Sunday-school? Yes; but without illustrations from human life it is like geography without maps, botany without leaves and flowers, or anatomy without the skeleton and manikin.

No one in his right mind would disparage the study of natural science. We are in one of those uncomfortable positions where we are forced to choose between two, each of which has our love, and we have chosen not as loving Cæsar less, but Rome more. We recognize the special merits of scientific study and wish our pupils could have much of it, but our limited time in school forbids our doing the half that we want to, and it is inevitable that we sacrifice something dear to our hearts. In deciding where the knife must fall, whether we look at each of these branches of study as a medium for teaching language, for cultivating a habit of reading and furnishing opportunities for its gratification, for broadening the mind and instilling the idea that one-sided judgments are exceedingly liable to be unjust, or whether we consider each as a means for inculcating the highest ethical precepts and filling the mind with lofty ideals, we cannot help feeling that it is history rather than science which, like godliness, is profitable unto all things.

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AN INSTRUCTOR IN READING.

Not long ago a bright boy came to the writer seeking some explanation in a literary selection—Webster's "Responsibility of Americans"—which he had learned by heart. So far as the words were concerned, he could make signs for them in their written order, but the entire thought expressed was not clear to him. When its meaning was explained he was able to recite the selection with more clearness and intelligence.

The discussion of the topic of reading soon after at a teachers' meeting tended greatly to strengthen the writer's conviction that to introduce into our work a new department, whose object should be to encourage reading among our pupils, would be proper and important.

Ever since the dawn of the system of educating the deaf, various methods have appeared one by one, each looking toward the bettering of the system. There still remains room for improvement, and in this connection the new department is spoken of as probably the best within our reach. To admit that as a rule deaf-mutes do not read as much as hearing persons and semi-mutes is one thing, and to devise means to instill into them a fondness for reading and a capacity for gathering honey-like results therefrom is another. To accomplish the latter result the employment of an instructor in reading is suggested.

We have a department specially devoted to articulation work, equipped with the necessary illustrative apparatus and trained teachers, and in many cases satisfactory results are obtained. But this question might be raised, and it is one which deserves just and careful consideration: Which alone offers more promises of securing to the deaf a constant benefit and the enjoyment of intellectual culture, usefulness, and happiness—articulation or reading? If, then, we can have special teachers for the former department, could not a similar arrangement be made for the latter, without which neither the oral nor the combined nor the manual method can work with success? The idea is worth experimenting with, and will, when thoroughly tried, cease to be an experiment.

Inferior reading prevails to a great extent among the reading portion of the community nowadays. Promoters and lovers of good reading need to work all the more assiduously

to arrest that pernicious movement, and were they half as active as the circulating agencies of low reading, the influence of the latter might be largely counteracted. To encourage good reading among children in school, as well as at home, would effectually remove their inclination toward reading poor literature. Naturally, deaf children need attention and care more than their hearing brothers and sisters.

Our graduates and other pupils leaving school may be judged in after years by what they know from reading and what they do not know from not reading. Their knowledge of readable matter in general is limited ; more in some cases and less in others. Most of the semi-mutes enjoy reading, and are constantly benefited thereby. Many of them are depended upon by the less fortunate for helpful information and counsel. In answer to a query with reference to his experience in reading while a pupil, a graduate, after stating the various difficulties encountered, said : Above all, I did not have any one to make me read to some purpose. So my taste for reading was not cultivated. * * * I do not think the librarian should have selected books for my reading unless he knew my mental capacity." With all due respect for any teacher who assumes the charge of a school library, the writer holds that it is too much for us to expect him to select books for those children who wish to read, in addition to his own school-work. It would make a great difference were the librarian relieved of his school-work, so that he might devote his whole time and energy to the development of the pupils' reading capacity.

In a recent number of the *Annals* it is stated that " nothing receives more attention in the public schools than reading. It forms a part of the daily exercises throughout the pupil's school-life. It should have fully as important a place in the education of the deaf, for we know that in reading lies almost the only hope a deaf child has of continued advancement in the acquisition of language." If the hearing child requires a constant course of reading in its school education, how much more does the deaf child need it ! Moreover, the former is, in many instances, supplied with wholesome books at home, while the other is not, unless he can be successfully interested in the library of his school. The public schools have a systematic course of reading, beginning with the First Reader and closing with selections of classical literature—verse as well as prose. An equivalent of that plan is a serious need in our work. But

something more is needed. In the public schools children are required to express an author's thoughts and ideas in their own language in as intelligent a way as possible. Possessing already a vocabulary that they have been acquiring from infancy without knowing it, they do not meet with any special difficulty in grasping the ideas and thoughts of books adapted to their understanding, and to them idioms are not foreign. But the deaf need to be taught to read in order to think correctly, and at the same time they want help in understanding what they read. They may be encouraged to notice, secondarily, how language expresses these thoughts and ideas.

It has been noticed that at literary meetings those who speak in debate best are those who read most. They have better ideas and arguments, and present them in a better style of thought and treatment. Sometimes this awakens other members to an active interest in reading, and thus enables them to prepare themselves much better for their work. Evidently in their minds lies something latent that would, if once called forth and cultivated, be useful in guiding their reading. Why shall we not have a special teacher whose office shall be to perceive the presence of that hidden inclination and guide it in the way it should go?

"Our great object," wrote the late Rev. Mr. Syle,* "is to persuade our pupils that pleasure is to be derived from books, and thus induce in them a habit of seeking it thence." In a paper read before the Tenth Convention of Instructors,† Mr. Woods, of the Illinois Institution, held that "both by precept and by example, he [the librarian] and they [the teachers] should daily strive to show the pupils the vast amount of pleasure and of profit to be derived from books, and constantly encourage and stimulate them to surmount every obstacle in the way of their full enjoyment of the intellectual feast spread before them."

That great object can be accomplished best through the patience and perseverance of an instructor in reading, the only objection being that his work would necessarily be the hardest portion that could fall to any one devoting himself to our work. For this reason he would be entitled to the hearty support of all the teachers in the school. The latter might, in various ways suggested by the instructor, co-operate actively with him,

* *Annals*, vol. xix, page 144.

† *Annals*, vol. xxvii, page 220.

and they would find that they had not been working in vain, for, as the ability to read improves, children will learn correspondingly better. Therefore, it would be to these teachers' profit to support and encourage the instructor ably in all available ways in answer to his invitation for such help, and in the long run we should find that the intercourse was truly a mutual benefit to both the instructor and teachers, to say nothing of the vast amount of constant profit obtained by the pupils. Much of text-book work might be omitted, and, in the place of the dropped portion, language teaching, interwoven with such instruction in reading upon some definite systematic plan as would be given directly by the instructor or indirectly by him through the teachers, would not fail to make pupils independent readers and seekers of knowledge and language. The too rapid promotion of pupils from class to class might be dispensed with, and by devoting their leisure school-time regularly to reading a greater and more widely reaching knowledge of matter and thought might be acquired. That such an arrangement would secure for the children permanent educational benefits, none can gainsay or deny. Moreover, by turning the deaf child as much as possible from the usual sources of information and learning known to himself into various directions of reading, the teacher would enable him to acquire a more substantial knowledge of matter, abstract as well as concrete. The outcome of this attempt would be the placing of the child more nearly upon the same plane with his hearing brothers and sisters who learn so much by hearing.

If we would have good habitual readers among our pupils, it would be desirable to begin with the little children. This can be done by awakening in them an early tendency to read, and, with time and constant cultivation and practice, the tendency will become well-rooted and permanent. Some of the children read what they will, and, with no timely and safe guidance in their choice of books and papers, they in some way turn more particularly to inferior reading.

The existence of a reading department would ultimately lead to various literary and reading organizations among the pupils, and encourage them in more ways than one. Dr. Watts has well said, concerning the use of reading, "Talking over the things which you have read with your companions fixes them in the mind." The existence of such organizations would effectually uproot many of those vulgar signs and ex-

pressions so commonly found where too few higher and nobler subjects are daily topics of communication. Start this kind of literary intercourse, so rich with fresh food from books, in the reading class, and it will make itself appreciated elsewhere.

One who is able to repeat as his own sentiment and appreciation of the value of reading the following words of Fénelon, "If the riches of the Indies, or the crowns of the kingdoms of Europe, were laid at my feet in exchange for my love of reading, I would spurn them all," and at the same time knows how to instill this very love into children, is the person to whom should be assigned the responsibility and care of the reading department. A command of clear, graceful signs, and a feeling of sympathy, love, and patience even toward the most stupid of those reading under his instruction and guidance, will increase the value and usefulness of his work. Time and experience will enable him to devise better methods of carrying it on. Thus the work will be found progressing more satisfactorily than if left with teachers, as is the case to-day. The instructor will have all the pupils of the school under his immediate supervision, and so can arrange a more comprehensive, complete course of reading. In the work, he may, like the chief instructor of articulation, have his assistants, if such help is needed. In accordance with his specified plan of classification and gradation, pupils may go to him and his assistants. Half an hour or an hour may be given to each class, and, though very little can be accomplished in each brief period of time, yet little by little the love and extent of reading will augment. The instructor will learn best by constant experience how to accomplish the double object proposed by Mr. Syle in the paragraph above quoted.

Let the room in which instruction in reading is to be given be a combination of the library and reading-room, and also be free from any impressions or associations whatever of the school-room; make it as attractive and inviting as possible, even like a study in one's home. A book-case filled with volumes of choice literature, intended for the child as well as for his elders, may be placed in this place or that. A reading stand and a rack for holding files of papers will not be out of place. Several tables, with books and magazines lying on them, will attract the eye, and even the heart, of those coming to read or to learn to read. Some other things equally attractive and helpful can be introduced. No pains should be

spared to have the room well ventilated and lighted. Rules that usually govern the library and reading-room need to be observed here also. Classes should be required to come in and go out in good order. The latest newspapers should not be left out, and care should be taken to show that each paper has, as a rule, its own plan of arranging news and information, so that by practice children may learn to know where to look for any desired or expected news or information without scanning the paper through, paragraph after paragraph, or column after column. It will be well to obtain papers and periodicals devoted to different departments of reading, so as to enable and encourage the pupils to keep up with the progress of the world. Thus he will be educated almost to perfection when graduated by the school. For when so placed as constantly to rub against the competing world, he may subscribe for and read his own trade or technical paper, which will supply him from issue to issue with the latest ideas and discoveries and improvements, thus making him a practical and skilled workman. The same benefit can be enjoyed by the gentler sex in their dressmaking, housekeeping, and other occupations that are adapted to their nature and agreeable to their preference. Moreover, more books and magazines may be perused and commented upon, thus pervading the reader's individual life with intellectual enjoyment and ennobling sentiment.

For a large number of deaf children assembled together for a long period of time, nothing can be more effective in giving them a right start than that ideal reading-room. Many who have a latent ability to read may be so awakened and quickened as to become great readers afterward. The room may be likened to a hot-bed, in which the minds of tender readers need to be cultivated before they can be transplanted into the general reading community to grow on for themselves.

The value and usefulness of the new department would grow with practice and time. It would require constant, individual care and skill on the part of the instructor and his assistants, to say nothing of patience and perseverance. The work would necessarily be hard at first, but would gradually become easier as the children became older and correspondingly more independent readers. Then it would be proved that "the man or woman who loves to read is educated."

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SIX MONTHS WITH A BEGINNING CLASS.

As THE education of the deaf advances and its many improved methods appear, teachers who love their work and seek to elevate it turn with eagerness to any helps which may prove beneficial to those under their charge.

The beginning of our work is most important, for the firmer the foundation, the more securely will it bear the heavy weight of added years of instruction. It is especially necessary that the undeveloped minds in a beginning class should be gradually advanced, step by step, using simplicity and common sense to guide us. To crowd a child's mind beyond its understanding in its first year is to ruin it irrevocably for future instruction. The responsibility of taking new pupils and moulding their little minds for future good or ill should be thoroughly realized before attempting the task.

How many of us understand the necessity of suppressing self, lest these little creatures should involuntarily imbibe the coarser qualities which we all possess instead of the finer, gentler characteristics which are a part of each nature? When we daily see the children's imitative powers brought into play and notice how quickly they have acquired our every action, we can readily see how much our own conduct governs those around us in a class-room.

Among many excellent methods in vogue, the one used in the Primary Department of the Pennsylvania Institution appeals (it seems to me) most directly to the teachers of beginning classes, and it is in conjunction with this method that I wish to suggest a few helps which may be of use in other school-rooms.

The ground-work of any plan should be carefully sketched and thoughtfully considered before being put to use. To interest ourselves does not always mean to interest the pupils, and, as we are a secondary matter, every effort should be brought into play to attract, interest and please the children placed under our care.

These little creatures must be taught to observe before they can learn to think, and, while they are blindly groping in the dark in regard to our meaning, any simple device which will attract and chain their attention is a step onward and upward. Forcing a child to memorize a word is a mistake which is often made. The memory is still inactive, and at first it should be gently stimulated and exercised, to the end that it

may finally become a useful faculty instead of a mere storehouse for words. Mechanical helps are of great use to a beginner.

Let the first few months' work be kept in sight as much as possible, allowing the child's eyes to pick out the representative word required in an exercise from a cluster of words already taught. In this way the effort of searching photographs the word upon the child's memory and produces the desired result in a natural manner.

No plan which is backed by thoughtfulness is too simple to use in a beginning class. The tendency to advance too quickly is hard to overcome. We must go down to the child's understanding instead of striving to raise him up to ours. A system often fails in other classes because of the inability of another teacher fully to grasp its inner spirit and meaning, which a printed explanation fails to elucidate. With this in mind, I shall endeavor clearly and simply to show what has been tried and proved to be a help to new pupils, using a few practical illustrations.

With beginners, good writing is essential. The formation of the letters is an easy matter in itself if the pupil is, at first, allowed to *trace* a written word instead of writing from a copy. This is only necessary until the little hand becomes accustomed to the motion of writing, and until some idea is formed of the shape and character of the letters. But the formation of the letters is not the only important part of writing for the child to learn. He must be taught that some of the letters are longer than others, and that a line is to be written *on*, not ignored or crossed in a hap-hazard way. If the small slates are scratched in groups of two lines, forming one space and placed two spaces apart, uniformity in writing can be obtained.

The small letters should be written in the space and the loop letters extend to the line above, while the reversed loops touch the line below, thus leaving only *t*, *d*, and *p* for the intermediate space. If fault is to be found in penmanship, it can generally be traced back to careless instruction in the beginning.

It simplifies the work greatly if the pupil is taught to spell a word on his fingers as soon as he is able to write it. In no case should verbs be introduced until the child has some knowledge of objects and can associate the name he has written with what it represents.

According to the system before referred to, five large slates, placed side by side, are used to represent the five parts of a sentence, namely: the subject (1), the verb (2), the object of the verb (3), the preposition (4), and the object of the preposition (5). Following this plan, the small slates of extra large size were ruled in five columns to represent the five large slates which this system requires.

The children having learned the names of ten or more objects, verbs were introduced. By presenting actions in striking contrast, the children were more able to see the use and office of verbs, and consequently "ran," "jumped," and "danced" were presented the same day.

There has been much discussion as to whether transitive or intransitive verbs should be taught first, but as the intransitive verb involves only one step in reasoning, it cannot fail to be easier for the undeveloped mind of a child to grasp.

Simultaneously with the beginning of verbs, the pronoun "I" must be used, as the actions, at first, are performed entirely by the pupils.

If the walls of the school-room are light in color, it will be found a great help to write "I" on the wall over the first or subject slate with a colored crayon. To do this a *red* crayon is best, as it shows distinctly all over the room.

Almost immediately "you" is needed, to carry out the same plan: "you" should be written over or under "I," using *the same colored crayon*. As the class advanced, every form of sentence was taught, using only intransitive verbs, but teaching two or more subjects and two or more predicates, until simple and compound sentences were thoroughly mastered, thus:

John ran.

Kate and Mary skipped.

Ettie jumped and fell.

Harry and James ran and screamed.

George fell and cried and Mamie laughed.

Before the first lesson in sentences was completed, the children were told to place a period as soon as each action was finished. Punctuation has always been a difficult thing to teach the deaf. The period is so small that its importance is constantly overlooked, and if its use is neglected at first, much trouble follows in higher class-work. A bright colored period after each sentence written on the large slates attracts the attention of the little ones and helps them to remember to place it after the sentence on their own slates.

The use of the colored crayon need not extend over two or three weeks, as by that time a habit is formed which is rarely forgotten by a thoughtful pupil. The teaching of compound sentences to young pupils is not so difficult as might appear, if the children understand the work in hand.

It is necessary to arouse each child's interest, and, with this interest ever in view, spur them on gently, being led by them rather than they by you. At about the sixth week transitive verbs were introduced, and this necessitated the use of "me;" so, to continue the former plan, "me" was written on the wall over the third or object slate, and "you" above it, using the *red* crayon. The time had now come for the children to understand that "you" meant not only their teacher, but themselves and each of their class-mates. To secure a real understanding of this pronoun, various ways were used. A short sentence was spelled or written to each child, addressing him as "you," and an effort was made to make the exercise interesting.

Another way: Have John perform an action, such as "Break a crayon," and require the rest of the children to write it on their slates. Then tell each child to go to John and show the sentence to him. On their slates will be written, "John broke a crayon," but to him they must write, "You broke a crayon," which involves the change necessary.

The simple and compound sentences were continued, using transitive and intransitive verbs, thus:

Harry broke a pencil.

James ate an apple and an orange.

Joseph and George shook the table-cover.

Emma pushed a chair and fell.

Etta shut the door and opened a window.

The class was now ready for possessives, but before the actual teaching began several sentences were written by the teacher on the large slates, which described some incident actually occurring in the room, as "Mary pulled Kate's hair," "Sadie tore my apron," etc. This was continued several days as a preparation for the new work. Each new step was introduced in this manner, and it led to a natural opening of the subject. Before allowing the pupils to write any sentences in the possessive case, the following exercise was placed on a side slate:

My hair.

Your hair.

— —'s hair.

The pronoun "you" having been taught, "your" seemed to be the same word, the *r* at the end having little or no significance to the children's minds. So to attract their eyes *y*, *o*, *u* were written in white crayon and the *r* in bright red, to show the difference between the words and concentrate their attention upon the *r*, which signifies possession.*

For the same purpose the dash was written in white and the apostrophe and *s* in red, which is another form important to understand at the first. In this way all the parts of the body were taught and copied on the side slates, where they were allowed to remain for several weeks. Before erasing them, the plural number was started, thus:

My hand hands.
Your hand.
——'s hand.

Care was taken never to neglect to add the red *r* to "your" or the red apostrophe and *s* to the possessive form. In writing the plural, attention was drawn to our two hands, and then *h*, *a*, *n*, *d* were written in white and *s* in red to designate the plural number. In this manner ears, cheeks, eyes, arms, fingers, etc., were taught.

The children now began to understand the plural form, so a few days after this it was found that the plural number could be simplified by drawing colored squares on a large slate, thus:

■	one — .
■ ■	two — s.
■ ■ ■	three — s.
■ ■ ■ ■	four — s.
■ ■ ■ ■ ■	five - - - s.

The squares were drawn with bright orange crayon and the name of the corresponding number was written alongside in white with a white dash (for the noun), which terminated in an orange colored *s*. This coloring drew the attention of the class to the *s* and emphasized its use when more than one object was employed. Before this exercise was erased, it was copied on the wall, where it still remains, a help to any backward or forgetful pupil.

The other pronouns were soon needed, and, to avoid mixing the genders, a picture of a boy was drawn on a flexible slate

* In the sentences as here given the letters to be written in colored crayon are printed in bold-face type.

and the masculine pronouns were written beside it, with a bright red dash after "his," to signify possession.

In the same manner the picture of a girl* was drawn and the feminine pronouns were written beside it, using a colored dash after "her," thus:



a girl

¹
she

her —

²
her

a boy

¹
he

his —

²
him



*The illustrations used in this article are taken by permission of Miss Sarah Fuller's "Illustrated Primer," published by D. C. Heath & Co.

Instead of the drawings, large figures of a boy and a girl could be cut out of pictures and pasted on card-board, using the pronouns as above, only it is important that the figures should not be surrounded by any other objects, hence the suggestion to cut them out.

After the drawings were completed, "he" and "she" were written on the wall over the subject slate, and "her" and "him" over the third or object slate, using the red crayon. These drawings were of great use to the pupils, and in case of a mistake in gender it was only necessary to place the child who performed the action in front of the picture he represented to convince each one in the room of his or her mistake.

Before taking up the plural pronouns, prepositions were taught, but only the simplest. As each was used, it was written on the wall in colored crayon, over the fourth or preposition slate, and was thus kept constantly before the eyes of the pupils to help their memory and exercise their judgment, thus :

Lizzie shook hands with her mother.

Kate took a crayon out of a box and broke it.

Sadie gave some candy to Etta and she thanked her.

Emma folded Joseph's handkerchief and put it into her pocket.

Mary took the pitcher off the shelf and put it on the table.

By the time the plural pronouns were required, the children had acquired the singular forms as well as the possessive case and plural number.

Naturally, "we" was the first plural pronoun used, and before actually teaching it a number of actions which illustrated its use were given, and proper sentences were written by the teacher. "We" literally means "I" and some one else, but a young child grasps the thought sooner if *all* the pupils, with the teacher, perform an act simultaneously, as "We bowed," "We ran and screamed," etc. In this way "us" and "our" were taken up, and the children were made familiar with their forms before they were required to write them.

As soon as introduced, "we" was written over the subject slate *beside* "I," but, to give it distinctive character, it was written in *blue* crayon instead of red. In the same manner "us" was written beside "me" over the object slate, and "our" over the same slate, with a dash following, which terminated in a different colored *s*, to show both plural signification and possessive form.

As in the singular number, the children were apt to confuse

the genders, and to guard against this two groups were drawn— one representing several girls with their appropriate pronouns attached, and the other, a number of boys illustrated in the same way, thus:

three girls

¹
they

their ——— s

^s
them



four boy ——— s

¹
they

their ———

^s
them

The s ending girls and the s ending boys were written with a colored crayon, and the dashes following "their" in both

illustrations were also colored and terminated in a different colored s. By writing "they" over the first slate and "them" and "their —s" over the third slate in *blue*, the puzzling question of pronouns was nearly solved. The singular pronouns being written in red and the plurals in blue served to separate one class from the other and showed their difference to the dullest minds.

The neuter pronouns in the singular number, being the same in both cases, were very readily understood by the pupils, and there was no conflicting of one with the other. "It" was written over the first and third slates in red, their plural forms having already been written in blue.

In teaching an action which involved more than one neuter object, the plural was first taught in this way:

"Mary dropped three crayons and broke *it and it and it.*" The three similar pronouns were then pointed out, and the children were shown that the repetition was objectionable. Finally, a line was drawn through "it and it and it," and "them" was written with a colored crayon upon the words crossed off. In this manner all the plural pronouns were first taught, the repetition of the noun or the singular pronoun being used in the same way, as "Harry and John lost *his pencil and his pencil.*" Drawing a line through the above, and writing the plural form "their pencils" over it, showed the children that the meaning was the same, although the words were different.

By this time the use of the colors pointed out the importance of a word or showed it in a new form, and the pupils seemed to grasp it more readily. Only a few days' practice was necessary to disgust the little ones with the repeated words, and the correct pronouns were used naturally.

The writing of original sentences telling of things which occurred out of the class-room was encouraged. Forcing original work is a mistake. It should be voluntary information, and, as an incentive, I would suggest that some simple reward be offered as an inducement to secure it, if it cannot be otherwise obtained. When a child had written correct work of this kind on his small slate, he was required to copy it on a large slate without using the columns.

Questions, except in the simplest forms, such as those beginning with "Who," "When," and "Where," are too difficult for first-year work. Questions to be asked truthfully should

only be used when the answer is *really* unknown. Such queries as "What is your name?" and "Where do you live?" are not questions in a true sense, unless asked by a stranger, and those who introduce such questions into first-year class-work will invariably give a wrong impression of a question's office. If a colored interrogation point is placed after each question for a week or two, its use and shape will stand out more striking when contrasted with the white writing.

To many the use of these colored crayons may seem trifling but when we train little minds and guide them through puzzling a series of forms as has been here mentioned, we should avoid all possibility of confusing their ideas, and this may be done by adopting any simple plan which can be obtained.

The devices here presented are in no sense theoretical, being the actual outcome of the children's need for mechanical help in such constructions as would naturally confuse them. Practice has proved their practicability, and the ability of the children to pick out the correct forms and apply them in their daily school exercises has proved their usefulness.

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A SIXTEENTH CENTURY TREATISE.

In the historical introduction I prepared for the English translation of Bonet's *Reduccion de las Letras*, published twenty years ago, some extracts appear relating to Ponce de Leon and his work which, so far as I am aware, have never before been published. While not containing much new information they confirm, in a remarkable manner, what we already knew from other sources of this great teacher and his interesting scholars. These extracts were taken from a MS. work written by the "licentiate Lasso" at "this house and monastery of Oña, on the 8th of October, in the year of the birth of our Lord and Saviour, Jesus Christ, 1550." The references to Ponce de Leon which they contain, however, occur only incidentally, for the work mainly treats of the various questions regarding the legal position of deaf-mutes which arose in consequence of the unexpectedly successful results of Ponce de

Leon's teaching. An analysis of Lasso's treatise may fitly find a permanent place in the *Annals*.

A few notes by way of preface may be useful. The original MS. is in the National Library at Madrid. I had a complete copy, as well as an English translation, made of it, in the hope of finding new materials for my account of Ponce de Leon. It would, I think, occupy an entire number, and perhaps more, of the *Annals*. Uncouth in language, barbarous in style, and obscure and prolix to a degree, it required careful study before its general drift could be comprehended, and certainly gives the impression of being only a rough draft, intended to be subsequently corrected and finished. Full of quaint conceits and mediæval fancies, it stamps its author as one still under the influence of mediæval and scholastic modes of thought and feeling, while its legal arguments reveal a degree of subtlety that occasionally degenerates into mere quibbling. Its one redeeming trait is the evidently sincere interest which the writer shows in the two scions of the noble house of the Constable of Castile, who owed so much, as he rightly judges, to Ponce de Leon.

One plain fact this treatise reveals is, that down to the middle of the 16th century the notions entertained regarding deaf-mutes and, of necessity, their position, remained practically unchanged from the time when Roman law first defined their legal status. The broad distinction between congenital and semi-mutes—called by Lasso dumb *ex natura* and dumb *ex accidente*, respectively—was still maintained to be that the former were born not merely speechless, but absolutely deprived of the very faculty of speech. Such an idea could no longer be sustained when Ponce de Leon's pupils gave such palpable proofs to the contrary, and Lasso tries to correct it, while at the same time adhering to the equally erroneous idea that speech is a natural and not acquired gift.

The mode of argument followed by the author is to take some legal text bearing on the point in question, quote and discuss the comments of some of the old jurists, including the celebrated Bartolus, and then put forward a fresh interpretation, with a view to adapt it to the altered circumstances of his time. I venture to think this old treatise may be described as the production of one of the class of scholastic jurists so numerous during the middle ages. From what its author says, it was plainly intended for publication. It throws an indirect

light on the condition of the deaf at this period, but at the same time it would be rash to assert of such legal enactment that they necessarily or always reflected the general feeling towards the class affected. Of this I have given illustrations in the historical account already mentioned, which, as well as the references to Ponce de Leon and other personal details in Lasso's work, I do not think it necessary to reproduce here.

The term *mayorazgo*, it should be explained, means, generally speaking, the right of primogeniture, whereby an estate passes to the eldest son.

"A Treatise newly composed by the licentiate Lasso, addressed to the most illustrious Señor Don Francisco de Tobar, legitimate heir to the Marquisate of Berlanga, and eldest of the house of Tobar, in which, under a new style and manner of speech, is examined and founded on law how one dumb nature, excluded in the institution of some *mayorazgos* where the dumb are excluded, is capable, should he speak, of the right of succeeding in the *mayorazgo*, as though he had not been dumb. Herein is examined the great novelty of speech which the same Don Francisco, who was dumb by nature, now enjoys, and to whom this work is addressed; and how he is the first deaf-mute in the world who has spoken by the ingenuity of man. Some questions and historical matters and other admirable things which have occurred in the world are touched on, and the question of who is dumb by nature and who by accident is also discussed. Good heed is given to many doctors who have spoken on the subject, refuting the errors which jurists have held on this matter. It is a new and subtle work as will appear by its perusal."

I. Dedicatory letter to Don Francisco de Tobar.

II. Proem and Preface, explanatory of the scope and object of the work.

III. Address to the reader, giving reasons for publishing the work in the vernacular of the country rather than in Latin.

IV. Introductory. Lasso incidentally mentions various wonderful things that have occurred in the history of the work and proceeds to show that the restoration of speech to the

* See *Simplification of the Letters of the Alphabet and Method of Teaching Deaf-Mutes to Speak* by J. P. Bonet, translated by H. N. Dixon, M. A., with Historical Introduction by A. Farrar, Junr. 1890. Price, 50 cents, post free, on application addressed to me as below.

dumb is equally possible and credible, but erroneously supposes this to be achieved by altering the inflexible course of nature, and not rather by making it subserve our purpose through a scientific comprehension of its laws.

V. Before entering on the main subject, Lasso discusses the meaning of the word *dumb*, as understood by various authorities, agreeing with those who held that dumbness is not entirely due to deafness.

He then, in a series of eight "foundations," proceeds to establish the right of a deaf-mute who has acquired speech to the succession of the *mayorazgo*.

(1) Under the existing law one dumb by nature cannot make a will, unless he can write and by signs show that he understood what he wrote, in which case a will drawn up under such conditions was valid. Therefore, how much more fitted and capable is such a one to make a will if he has learned to speak, and express with his tongue his meaning and intention. Hence, if he has understanding and can speak, there is no longer any reason for this law, since he who speaks cannot be called dumb. But as the doctors held it to be impossible that one dumb by nature could speak at all, he was said to have been dumb by accident should he at any time succeed in speaking, and since such a one is not excluded by this law, there is no reason why one dumb by nature should not also be fit and capable of exercising his rights if he acquires speech.

(2) In this section the author inquires wherein consists the difference between the dumb by nature and the dumb by accident, seeing that experience proves them to be equally capable of speech. He controverts the popular view that the dumb by nature are those who are absolutely deprived of the faculties of hearing and speech, unless they afterwards hear or speak, when the original cause of the loss must be considered as accidental. This was also the view of the doctors and jurists. He holds, on the contrary, that the difference between the two classes is relative and not absolute, since the fact of the dumb by nature being able to learn to speak shows that the natural instinct or faculty existed in them. He would, therefore, define the dumb by nature as those in whom this natural instinct to speak had been overcome or thwarted by some illness or accident that supervened before the time when they would have heard and spoken in due course. Or, viewed in another way, let us assume that *all* are born dumb; then, if from any cause

one is unable to make that use of the organs of hearing and speech for which they are destined, he simply continues in the same state in which he came into the world. The law, holding that such a one could not possibly speak, excluded him from the rights of the *mayorazgo*. The ground of this exclusion can no longer be sustained.

(3) Other cases are adduced where acts become valid by the removal of the disability which would otherwise have rendered them invalid. Hence, if one dumb attains to speak, since the disability ceases he cannot legally be termed *dumb*, and cannot, therefore, be excluded from the rights of the *mayorazgo*, to which he ought to be admitted as though he had never been dumb.

The cause and motives are examined by which a testator excludes from the *mayorazgo* one dumb by nature, all of which are removed in the event of his speaking, and thereby proving his capacity to exercise his rights.

(4) The various legal meanings which may be attached to the word *dumb* are discussed, some jurists being of opinion that it does not necessarily imply inability to speak. He, however, insists that in all documents the word must be used in its customary and proper signification of *not speaking*. It follows, as a matter of course, that one dumb who does acquire speech is not, therefore, excluded from his rights.

(5) The law is discussed which places one dumb, whatever his age, in the same category as infants, since, like the latter, he cannot speak or have understanding, which holds good so long as he remains in that condition; but if he has sense to understand and make known by signs, contrivance, or characters what he wants and holds in his will alone and without external assistance, he is fit and capable of accepting inheritance and contracting, including marriage; hence, in the *wide* sense of the word, he cannot be considered legally dumb.

The prohibition from the *mayorazgo* would, therefore, apply only to those who had neither judgment nor understanding. This being so, with how much more force and juster cause should those mutes who speak, write, and have understanding be admitted to the *mayorazgo*? The whole force of the law in regard to infants rests on the fact that they neither have judgment nor yet know how to speak, and since this is the condition of one dumb, he is by law an infant. Therefore, since an infant, if he should speak and understand, would no

longer be called an infant, so if one dumb does the same he cannot and ought not to be called dumb. Hence, in regard to the *mayorazgo*, etc

(6) Attention is directed to the law by which certain circumstances that might occur after a will was made, such as the birth of other children, are held to render it invalid and alter the disposition of the estate. Following this line of argument, he shows that the fact of one dumb speaking constitutes a change in that disposition of the *mayorazgo* which excluded him on account of being dumb, and that, as there is no proof that the testator intended to exclude such a case, he must be admitted to his rights—a step which is also shown to be in accord with the dictates of natural justice.

(7) It is a principle of law that an error in the proper name in a will does not vitiate it where the aim and intention of the testator is otherwise well ascertained. Now, we have proved that the term *dumb by nature* is erroneous, since the dumbness is not inherent, but was caused by an alteration of the course of nature through illness or accident, and that, therefore, they are, properly speaking, dumb by accident. Those who have hitherto been considered dumb by accident are not excluded from the *mayorazgo*, by reason of the understanding which it is presumed they had before losing their speech: hence it follows that those who are called dumb by nature are not excluded, because by the very fact of speaking they are proved to have been in reality dumb by accident. Therefore, the error of a testator in calling those dumb by nature who are, in effect, truly dumb by accident, does not vitiate the will.

(8) The law is referred to by which one dumb is prohibited from holding a fief, but, should he acquire speech, is fit and capable of retaining and serving the said feud. The same argument holds equally good in regard to the *mayorazgo*.

In concluding this part, Lasso says that so long as there is nothing to the contrary decided or determined by the testator, his legitimate descendants must succeed in their order, because the *mayorazgo* is founded on natural law. And it is not presumed in law that he would be so negligent of his conscience and the salvation of his soul that, if there be fitness and capacity in those to whom he is bound by natural ties, he would wish to exclude and estrange them from the *mayorazgo* by reason of the duty he has in *foro conscientia*. And the dumb who acquire speech, and are fit to administer and govern the

said *mayorazgo*, are called to it by natural law as though they were not dumb, since the law does not regard those dumb who speak. Hence the testator is bound *in foro consciencie*, and it is not presumed that he desires to exclude and estrange the said dumb one should he eventually speak.

VI. Miscellaneous questions.

1. Can the dumb celebrate the mass?

The canon law considered the dumb incapable of celebrating the mass, because it was necessary to pronounce the words of the consecration of the Eucharist in order that the transubstantiation might be effected. Nevertheless, they were not precluded from marriage by signs, this being a matter *pro forma*. Lasso argues that the dumb can celebrate if, like the Velascos, they can speak clearly and pronounce the words. How much more then will they be capable of the duties attached to the *mayorazgo*!

2. What must be the manner of speech of one dumb in order that he may be said to speak perfectly and intelligibly?

In answer to the objection which might be raised, that unless the dumb by nature speak so as to be well understood by all, the will of the testator is not carried out in proper form, he points out that if their speech be imperfect, still, if it is truly significative, they are fit and capable of exercising the rights of the *mayorazgo*. There is, however, a very broad distinction between shouting—the meaning of the word *mugitus* from which *mudo* is derived—and voice. He adduces the case of some who hear, yet speak very indistinctly, but are not thereby disqualified. Therefore, since the speech of the dumb by nature is truly the utterance of the voice, duly formed and pronounced, and is not shouting, they are not dumb, hence there is no longer any reason for their exclusion from the *mayorazgo*.

3. Can one dumb testify in a court of law, and, if so, how is his word to be attested by the attorney?

He can testify, if he has sense and understanding to do so, concerning what he could see and comprehend. The oath being *pro forma*, like the marriage ceremony, he may swear and give evidence, it being left to the discretion of the judge to decide as to any presumption of deceit on his part. The attorney may accept the signs of one dumb as evidence if he himself understands them, but if not, then he may use the intermediary of the relatives and neighbors.

4. In regard to the sacred authority* which says, "keep from those whom nature has branded."

This is not to be understood, as it is by many, of the dumb by nature or the dumb by accident. Aristotle teaches that nature is constantly striving to produce the best and most perfect, therefore, if children are born with some defect, it is owing, not to any failure on nature's part, or to any desire to brand them, but to some want of disposition in their constitution to respond to nature's efforts. Also, according to Aristotle, all creatures are born speechless, which is in conformity with nature, because it is necessary in order that it may perfect their speech. When there is some defect in their natural constitution, the creatures, being unable to remedy or supply it, remain dumb by nature; and, according to its intensity, the infirmity in some dates from their birth, in others after, or it may be due to some new cause supervening during the short period they remain mute.

The words quoted must, therefore, be taken in an allegorical sense, as applying to the wicked who will not confess with their mouths, and who are consequently to be avoided.

Lasso's concluding words, which, it may be remarked, contain the conclusion of the whole matter, are: "Since in Christians, such as you and your brother are, we witness the acts of Christian men and see you speak as truly and really as we do—acts, such as are not usual among those whom we call dumb, to wit, confessing, hearing [figuratively], and understanding, and the practice of Christian arts, *i. e.*, reading, writing, and speaking clearly—there is no reason for you to be called dumb (with all the stigma implied), nor as in any sense branded."

How the existence of a work relating to the deaf, the earliest known, can have so long escaped the notice of those for whom it ought to have possessed the deepest interest—teachers and friends of the deaf—is not apparent. But it receives full and prominent notice in *Ensayo de Una Biblioteca Española de Libros Raros y Curiosos*, by Don B. J. Gallardo, vol. iii—a truly monumental work in four volumes, of which the last two have only recently appeared.

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* This is presumably the Bible, but I am unable to find the reference.

THE WHIPPLE NATURAL ALPHABET IN ITS REVISED FORM.

THE fact is proverbial that all inventions are at first encumbered with technicalities and ambiguities wholly unnecessary to the proper understanding of the principle or theory involved. As time and usage render apparent one by one the nature and superfluity of these complications, the wise and practical inventor hastens to discard the cumbrances, and to substitute where necessary, an element hitherto lacking which will assist the motive instead of retarding its demonstration.

In consequence of the very limited means of reference records left by the author of the system, a proper and adequate conception of the many excellencies embodied in the Whipple Natural Alphabet can be had only through systematic study and comparison of the details presented at different stages of progress during the first few years of experiment and actual use. This being virtually the sole form in which tangible proofs now exist touching the development of the system, and as it seems desirable that the invention and theory of the late Mr. Zerah C. Whipple should be placed upon record in a manner worthy of its importance and value as an addition to the existing aids in the instruction of articulation to the deaf, it has been deemed advisable to supplement the analysis of the system which appeared in the October *Annals** by a later and amended explanation more nearly expressive of the perfect simplicity and practical utility which the system of symbols afterward attained.

The illustrative chart which accompanied the article just referred to was a copy of one made by Mr. Whipple for publication in the report of the Connecticut State Board of Education for the year 1873, a date almost coincident with the initial experiments in the use of the invention. It expresses, naturally, the more essentially rudimental elements which were the basis of the subsequent development of the symbols, and while it is very interesting, not only as embodying the first conception of Mr. Whipple, but because it is accompanied by the o

* See the *Annals*, vol. xxxvi, pp. 288-291. The present article prepared for the number of the *Annals* immediately following the October number. Its publication has been deferred through a misunderstanding with respect to the preparation of the plates of the illustrative chart for which neither the author nor the editor was responsible. E. A. F.

written explanation by him which is now known to exist, the chart is, nevertheless, highly unsatisfactory as a matter of record to those acquainted with the gradual perfection which resulted from the unremitting study given the subject by Mr. Whipple during the closing years of his life. Practical experience quickly convinced him of the deficiencies of the first definite expression of his idea, and so numerous were the early series of revisions that several features contained in the chart published in 1873 prove wholly unfamiliar to one who entered his school scarcely a twelvemonth thereafter.

A comparison between the original and the revised series of symbols may not reveal any radical changes to the casual observer, but a careful study of the relative features demonstrates that the chief points of variance are these: (1) The condensation of the rudimentary elements; (2) the elision of every suggestion of technicality, as well as of the purely explanatory marks which were at first considered essential to a perfect understanding of the symbols; (3) the addition of several symbols which convey more correctly the idea of sounds which glide into each other, the combinations, diphthongs, and the like; and (4) the modification in the shape of certain symbols given them with the evident desire to impart a more expressive naturalness, more strongly indicative of the position assumed by the lips, thus aiding indirectly the principles of lip-reading.

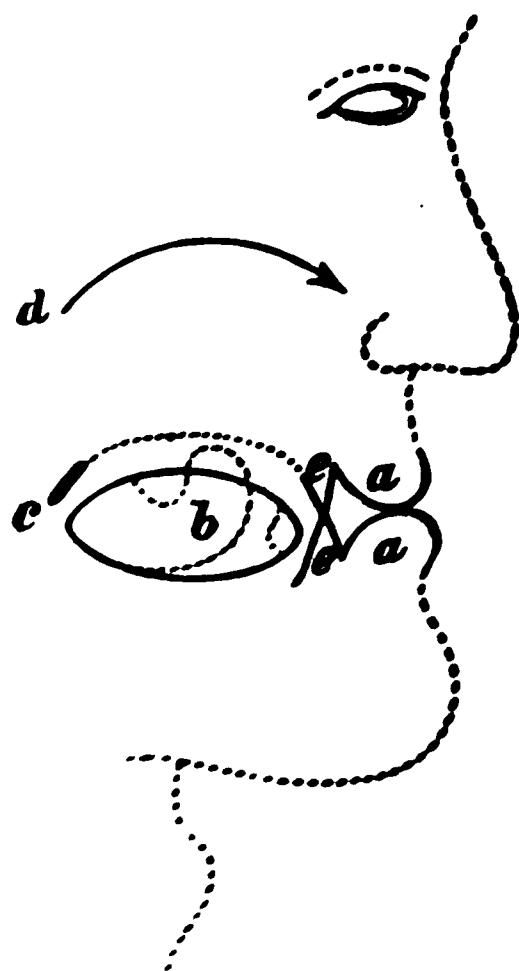
These changes, while in some cases minute in themselves, tend always to enhance the expressiveness of the symbols, and this painstaking regard for the smaller details is additionally indicative of the well-known humanitarian motives of Mr. Whipple. Had he desired only to provide for himself and his co-educators an instrument aiding their mutual efforts in behalf of the deaf, he might well have been content with a very slight modification of the original characters, in themselves so unique and so nearly expressive of the principle involved. It might also have been urged that a further abridgement would tend to destroy the primitive originality of some of the most distinguishing features; but Mr. Whipple's ambition was wholly centred in a far different desire. Recognizing as beneficiaries but one class, the afflicted to whom the blessing of hearing and speech had been denied, every energy was bent upon the task of devising an artificial means of supplying this deficiency, and, with a keen perception of the myriad difficulties which beset all

among the deaf, he addressed
the features of the positions assumed
the actual formation of speech.
representing the mouth-shapes.
the pupil, and hence the alteration
models to attain that end.
between the pictured organs and the
expressed, it was found unnecessary
shown on the original chart (and
the explanation which accompanied
explanatory as outlines. The sole
distinction between
the former being outlined heavily.
the use of the arrows denoting the
some cases deemed advisable.
the smallest suggestion of superfluous
and the natural alphabet, rigidly
into the simple, concise form of
inventor's greatest desire. The
were made as consistently expressive
as so complex a subject would
in which the symbols appear is
Mr Whipple's highest achievement.
The key-note of his motives once appreciated,
further discussion of the causes which
changes is unnecessary. That the present
and that no excess of authority

amended chart which follows is at least truthfully and conscientiously expressive of the facts which remain.

Not merely a general idea of possibilities and a conjecture of probabilities are represented by the present discussion of this fruitful subject, for assurance has been made doubly sure. It is impossible properly to gauge the limitations of the abilities of others, and a study of the tangible proofs now existing, together with a close adherence to details, minor as well as major, will tend to a reasonably correct and approximate theory.

An intimate knowledge of the method of applying the invention of Mr. Whipple in actual practice is almost indispensable to a proper appreciation of the many excellencies of the system. This has been exhaustively discussed in "Circular of Information, No. 3," shortly to be issued under the auspices of the American Association to Promote the Teaching of Speech to the Deaf, which must necessarily be supplemental to this in the matter of further detail. A mere outline of the symbols will not be expressive of the full significance of the valuable heritage which is Mr. Whipple's enduring monument and the precious legacy of the deaf.




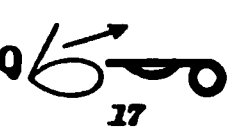


PHYSIOLOGICAL BASIS OF THE WHIPPLE SYMBOLS.

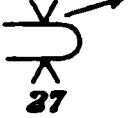



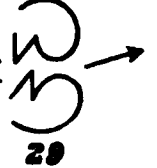

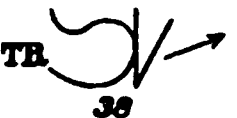






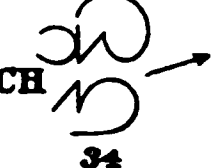



a a, the lips : *c c*, the teeth : *b*, the tongue : *c*, the soft palate : *d*, the nasal passage.

THE WHIPPLE NATURAL ALPHABET.








ELEMENTARY SOUNDS OF THE ROMAN CHARACTERS.

A  1	G  7	M  13	S  19	Y  25
B  2	H  8	N  14	T  20	Z  26
C  3	I  9	O  15	U  21	
D  4	J  10	P  16	V  22	
E  5	K  11	Q  17	W  23	
F  6	L  12	R  18	X  24	

COMBINATIONS.

TH  27	TH (Vocal)  28	KS or X  36	GZ or X (Vocal)  37
SH  29	ZH  30	TR  38	DR  39
CR  31	GR  32	WH  40	
ER or UR  33		CT or KT  41	
CH  34	DZH, G or J  35	ING  42	
		YOU or U  43	

ADDITIONAL VOWEL SOUNDS.

 44 ä;	 45 ä;	 46 ë;	 47 ï;	 48 ô or a;	 49 ô or u;	 50 o or u.
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The explanations which follow are not intended as an infringement upon the analysis by Mr. Whipple which appeared in the October *Annals*, but in the honest belief that it would be Mr. Whipple's own wish that a thorough explanation should be given the improved symbols, especially as this will tend to a more general understanding of the embodying principles. To this end, the following interpretations have been made to conform as nearly as possible with those of Mr. Whipple, and are similarly arranged, although not in the same order. They are only inserted for the purpose of giving requisite completeness to this amended synopsis.

Mr. Whipple's own definition is this:

The letters of the natural alphabet are pictorial of the organs of speech placed in certain relative positions, such as would be assumed by those organs in speaking the required sound. In other words, each letter of this alphabet is a reminder to the person who sees it to put certain parts of the mouth in certain positions relative to each other in order to produce a certain elementary sound of the language.

The symbols, then, are intended to represent the positions of the visible vocal organs, the lips, the teeth, the tongue, and the soft palate and nasal passage, the two latter being invisible, but easily identified by accenting the upper throat and the nose in the respective cases. As elsewhere explained, the heavy shading in certain characters denotes voice, while lighter outlines and the arrows specify breath-sounds.

In order to gain a more definite understanding, comparison should be made between the physiological chart, which is the real basis of the symbols, and those characters which represent the profile view of the organs in actual position for forming various sounds. This applies to all except the vowel sounds (figs. 1, 5, 9, 15, 21, 23, 25, 43, and figs. 44 to 50, inclusive), which represent the shape of the aperture made by the lips as seen from a point directly in front. These vowel symbols are constructed according to the degree of openness of the lips and teeth, and their shapes are as nearly correct as it would seem possible to make them. In these, for the most part, the tongue occupies a secondary position, and in some cases it is wholly invisible, so that the lips and the nearly parallel rows of teeth behind them, which are hidden except as to the edges, are the two elements mainly considered.

Essentially the same explanation applies to each of these vowel symbols, with the exception of those showing the sounds

of E and I, where the tip of the tongue is placed against the lower edge of the upper teeth. As these symbols have been fully described in Mr. Whipple's own analysis, and independently in "Circular of Information, No. 3," it is superfluous again to submit a detailed explanation of each.

Fig. 2, representing the sound of B, shows the curve of the upper and lower lips (*a a* of the chart) pressed together; fig. 16, showing P, is formed in the same manner, the arrow and lighter shading showing it to be a breath-sound or aspirate.

The symbols for S and C (figs. 3 and 19), and that showing Z (fig. 26), denote the upper and lower teeth (*e e* of the chart) closed together, with the same mode of expressing the breath and vocal sounds respectively.

This same difference in sound, but similarity of outward appearance and position, is apparent in the symbol for D (fig. 4) and that for T (fig. 20), which show the curve of the tongue *b* against the upper teeth *e*; also in F (fig. 6) and V (fig. 22) the upper teeth *e* resting against the lower lip *a*.

Fig. 7, the hard sound of G (as in *good*), and fig. 11, the soft sound of K (as in *kite*), are intended to represent the closed nasal passage, the sound being produced by pressing the palate *c* against the back of the tongue *b*, which is raised and lowered, but still preserves much the same angle with the roof of the mouth as shown in the symbol. This is one of the most difficult characters to explain verbally, and this is equally true of fig. 8, the aspirate sound of H (as in *hard*), which shows the open passage between tongue and palate with the breath escaping between.

Fig. 10, corresponding to J and its cognate, CH, is also shown among the combinations (figs. 34 and 35). The sounds are literally *tsh* and *dzh*, the tongue being placed against the teeth as in T and D, the lips extending outward and the voice passing between.

Fig. 12, L. The tip of the tongue in a pointed shape, so as to form literally an acute angle, is placed against the lower edge of the upper teeth.

Fig. 13, showing M, is simply the pictured closed lips *a a*, with the addition of the curved line *d*, denoting the nasal passage, the sound proceeding through the nose.

Fig. 14, N, shows the tongue *b* against the upper teeth *e*; exactly the same position taken in forming D (fig. 4), with the added nasal curve.

Fig. 17, Q, is merely the combination of figs. 11 and 21, the sound being that of *keio*.

Fig. 18, R, shows the peculiar curve of the tongue, upwards, toward the roof of the mouth.

Fig. 21, also shown among the combinations in fig. 43, represents the letter U, as well as the word *you*. It is a combination of the vowel sounds of *ɪ* and *oo*, and may properly be classed among the vowels.

Fig. 24 (also fig. 36) represents X, which is really the spontaneous utterance of *ks*, and therefore combines figs. 11 and 19. Its cognate, *gz* (fig. 37 of combinations), is also otherwise portrayed in figs. 7 and 26.

Figs. 27 and 28 show the tongue *b* thrust between the teeth *e e*, as in uttering the sounds of *th*, both vocal and aspirate (as in *with* and in *thin*).

Figs. 27 and 30 show the lips *a a* in the protruding position assumed in *sh* and *zh*.

Figs. 31, 32, and 33 give the combination of figs. 11, 7, and 49, with the curved symbol *r* (fig. 18), showing *cr* (literally *kr*), *gr*, and *er*, or *ur*. Also in figs. 38 and 39, showing respectively *tr* and *dr*, this same curved tongue shape is substituted for that shown in the elementary sounds of D and T at figs. 4 and 20.

Fig. 40, *wh*, is the only instance in which the cheeks are considered. The peculiar inflated shape from which the breath issues through the lips is thus expressed.

Fig. 41, the combination of tongue and palate in the sound of *ct* or *kt*, depicts the tongue *b*, which is first raised at the back against the palate *c*, and immediately afterward against the upper teeth *e*.

Fig. 42 represents *ing*, the position of the tongue *b* and the palate *c* being much the same as in the hard sound of *g* (fig. 7), while the voice, instead of being in the throat, proceeds through the nasal passage *d*.

It must be noted that the arrangement in alphabetic order has been made for the sole purpose of facilitating the present description. As phonetic spelling is the rule, the symbol representing one letter often stands for two or more having the same outward appearance and sound. There was no recognized order of procedure in applying the characters, and this again is fully discussed in "Circular of Information, No. 3," to which reference is once more directed.

The following plate has been made by a photographic process from a chart prepared by Mr. Whipple himself. The original, which is written on muslin in India ink, was exhibited at the First Summer Meeting of the American Association to Promote the Teaching of Speech to the Deaf, and at the close of the meeting was presented to the Volta Bureau. It is inserted here, by permission of the Bureau and the Association, to illustrate the manner in which the symbols are combined to form words:

Something about Common Things.
For pupils of the First Class.

In the winter we have to dress
 warmer than we do in the summer.
 In the winter we open the
 doors and windows, and
 ourselves to keep cool.
 In the winter we put on thick
 clothing, make fires in
 our stoves, and keep well
 doors and windows tightly
 closed, to keep warm.
 Some foolish persons drink
 rum and gin, and other
 strong liquors, to keep
 warm in winter.

DAISY M. WAY,
 Kansas City, Mo.

A NOTE FROM THE SCHOOL-ROOM.

Among the books which I prize is one that was composed in this fashion: I had charge of a bright class; every day, in response to my appeal for "original" matter, there would come to my desk choice bits of language, curious expressions (indicative of vain struggles of memory to recall some idiomatic phrase), and ingenious solutions of problems. For a while I followed the custom that I had pursued for years of jotting these gems down on bits of paper, which were afterwards lost or stored away with other manuscript of the school-room and forgotten. But one day I adopted this plan: After correcting the language on a certain slate, I handed a blank-book to the writer and told him to copy the corrected form into it. I thus at the same time secured what I wanted and impressed on the pupil the corrections made. Sometimes I required him to copy his own language and then make the corrections that I indicated. The plan acted as a stimulus to the class, for I was careful to permit but little to go into the book. It was regarded as a privilege to scan its pages and see who had furnished the greatest number of paragraphs. I note where one boy has asked me where the water of the great lakes of Africa comes from, as he had observed on the map that there were but a few small streams running into them and that they had the great Nile river for an outlet.

A conscientious young lady inquires, "Is it right to say 'I envy her,' when I am in fun?"

Another girl, fond of history, asks, "Why does not our history tell the relation of Pompey to Cæsar?"

One of the grammarians of the class expresses this thought: "I have wondered why 'her' has no other form that could be used in the objective case. Since 'her' (like 'his') is in the possessive case, it ought to have another form, like 'him.'"

An inventive genius offered this in extenuation of the fact that he had a poor lesson: "Last night my old heart grew cold and sad while I was reading of the funeral rites of the Romans, and I turned away from reading it." It did not in the least lessen my respect for this young sophist to find that he had simply adapted a portion of the historian's language to suit his own pressing needs.

Another made this application of a proverb: "Like the dog

in the manger, some of the pupils here often keep the daily papers in their desks while they are busy. They should give the papers to those who have finished work."

Writing of a very ambitious girl, one of her classmates said, "L—— is never satisfied with her average. If she got 100, she would complain because it was not higher."

An energetic young man, disgusted with the indolence of a certain individual, writes in this strain: "What a lazy fellow —— is! He is indeed lazy beyond measure. Though he is fat, yet he is thin in one way—he makes thin excuses."

Here is what a girl wrote in response to my direction to tell the fable of the Hare and the Tortoise: "A tortoise was slothful. A rabbit was far behind the tortoise. While the tortoise was sleeping, the rabbit, seeing it sleeping, ran ahead of the tortoise. That is a quite faded story. Mr. W—— told us this story a long time ago."

One of the most amusing of these contributions is that describing a convention of animals, and in the address of the presiding officer are interpolated the words "laughter" and "applause." While the wit which is supposed to excite these bursts of laughter and approval is a little labored, still the interpolations are quite as apt as they often appear to be in reports of *bona fide* speeches.

An observant pupil, in defending her use of the phrase "back and forth," which she reversed, said that we say "I walked to the city and back," and hence to be consistent we should say "forth and back."

A young philosopher moralizes as follows: "My youth will soon pass away. Alas! I am the oldest boy in this class."

Here are a few specimens of mathematical ingenuity:

Question. "If ten boys the size of George are on a sled, moving at the rate of ten feet a second, and strike a wagon weighing a ton, will the shock move the wagon?"

Answer. "I estimate that George weighs 140 pounds. $140 \times 10 = 1400$ lbs. The ten boys weigh 1400 lbs. When they slide 10 ft. a second their momentum will be 10 times 1400, or 14,000 pounds. Yes, the shock of the wagon will be 7 times shocked." (She evidently was trying to say: Yes; the shock will be sufficient to move a mass 7 times as great as that of the wagon.)

"Last night I asked L—— if a body weighing 50 pounds moved 5 seconds with a velocity of 500 ft. per second, what would be its momentum. She multiplied the mass by 500 ft.,

and said that the 5 seconds was not necessary. I said that it must be used, but she would not agree to it. Which is right?"

This same young lady, L——, draws a picture of two balls of unequal size balanced at the ends of a rod, and then speculates as to whether the balance would be preserved if the small ball and the rod next to it were moulded into one up to a point equally distant from the support to the point where the large ball is. (She makes her meaning much plainer than I fear I do in this condensed form.)

The above-mentioned examples have the additional interest of being the work of young ladies, who are generally supposed not to take kindly to arithmetic. I encouraged in these pupils independent thought, telling them that they must not swallow what I said simply because I was their teacher, but that they should prove all things to their own satisfaction. Though I had charge of the class for over two years, I can recall no instance of impertinence. We often disagreed, and the pupils occasionally convinced their instructor that he was in the wrong. I note one instance of this kind in my book: The question which I had given was with reference to the length of time that would elapse before we would hear the splash of a stone dropped into a well 16 feet deep. It being a review question and our elementary book of physics giving 16 feet as the distance a body falls during the first second of its descent, I was surprised to find that one boy answered $1\frac{1}{70}$ seconds. Without paying any attention to the elaborate array of figures which had led to this result, I scored the answer as incorrect and handed the slate back. Presently it came back to me with the explanation that the $\frac{1}{70}$ of a second represented the time that it would take the *sound of the splash* to travel 16 feet, since 16 feet is one-seventieth of 1120 feet, the distance travelled by sound in one second. I could raise no objection to this reasoning.

This class became quite proficient in the use and application of proverbs, frequently inventing stories to illustrate them. Here are a few specimens in condensed form:

"The men on a sinking ship crowded into the life-boats ahead of the women. Self-preservation is the first law of nature."

A young lady who paid no heed to criticism of herself by others was said to believe in the proverb, "Where ignorance is bliss, 'tis folly to be wise."

I presented this question to the class one day: "A man

who had a sick wife requested his neighbors to make no noise. One neighbor paid no attention to the request, and had music at his house until a late hour. Did he have a right to do that?" To which a young lady replied: "Yes, he had a right to do it, because we live in a free country; but I think he should love his neighbor as much as himself, and beside this he should remember the proverb, 'Do as you would have others do to you.'"

One tells the story of the Good Samaritan and applies the saying, "A friend in need is a friend indeed." Whenever I found a puzzling question in the papers, of a character that my pupils could comprehend, I always gave it to them at the end of their regular lesson. Here is one: "What man is famous because he could not do a certain thing?" Five of the class wrote, "Washington was famous because he could not tell a lie." Several wrote, "Washington was famous for his truthfulness." This made me a little suspicious that they might have had the question before, but I cannot say whether they had or not.

I thought this was rather entertaining for an entry in a morning journal: "This morning several boys were on trial before Judge Crouter. He questioned them about chewing tobacco. They were all weighed in the balance and found wanting."

Here is another entry from the "historian": "It is a coincidence that Georgia was named after King George and was first settled in the same year that Washington (whose first name was George) was born."

"Can animals reason?" "Yes, they can. I have read often that the dogs and horses saved their masters from danger. I think hogs are the only animals which cannot reason. They seem to be too stupid to live."

Such questions as the last I used quite frequently, my purpose being, of course, to encourage original and independent thought. The class was in its tenth and last year. It was taught altogether by the manual system, and the extracts given were written by those who had no power of speech whatever, with the exception of one boy, whose principal vocal effort was to hail me by my first name when he desired my attention. Five members of the class are now in the College at Washington.

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LANGUAGE.

THE most noticeable feature of this somewhat ungainly quarto is the reproduction of the girl's letters. Taken with the narrative of her brief education, they are simply wonderful, and one almost hesitates to draw the inference that what was possible in her case is possible generally with blind deaf-mutes. It would seem as if this child were exceptionally gifted, yet the record is one of immeasurable encouragement.—*Comment on the Helen Keller "Souvenir" in the Atlantic Monthly for March, 1892.*

One does "almost hesitate" to draw such an inference, especially if one has been teaching deaf-mutes, blind or otherwise, for any number of years.

If one-half that is said of Helen Keller be true—and the high character of her witnesses forbids all doubt as to their veracity—she is, with the possible exception of Shakespeare, the most wonderful being that has ever lived. Yet here we have one of the first literary magazines of the land timidly suggesting the possibility of Helen Keller being an exception to the average blind deaf-mute, but tempering the severity of this suggestion by the patronizing assurance that nevertheless "the record is one of immeasurable encouragement," all of which shows how little even the most learned authorities know of language in its relation to the deaf, or, for that matter, of language in its broadest, deepest sense.

There are times when a teacher to whom the study and teaching of language is a joy and delight feels like crying out in despair, "Nobody in this world understands the importance of, or cares for, my work!" From the average visitor he of course expects no appreciation. The average visitor generally asks if raised letters are used and vocal music taught. Receiving a negative reply to these intelligent queries, his interest flags and he requests to be shown to "the room where they talk." But inside the camp, at least, the teacher thinks wearily something different might be expected.

"Oh, yes," the directors blandly assent; "language is a most important study for the deaf," and they proceed to introduce model drawing or something else that shall encroach still farther upon the scant portion of time already allotted to that "important study."

Occasionally, a distinguished principal of another school visits the class-room, and the teacher thinks, "Now he will be interested—he will understand—he will examine my class and

see, however faulty the results, that we have worked." Vain hope. If not called away immediately by a committee meeting, a sight-seeing expedition, or some other equally pressing engagement, this eminent light of his profession may deposit his hat upon a desk, break a crayon in two, and laying the pieces beside the hat, ask solemnly, "What did I do?" Of course, the one weak-minded pupil in the class immediately raises his hand, and, after a short but painful struggle with his prepositions, evolves a chaotic answer, upon which the distinguished visitor says, "Very well, very well, indeed," and departs with a polite bow and smile which but imperfectly conceal his inward disparagement of the attainments of the class, leaving the teacher gazing ruefully at Maud Jones's closely-written six-page essay upon Queen Elizabeth, at which literary production his guest had not even glanced.

He carries this, or some other composition which to his eye shows marked improvement over preceding efforts, to his own principal or to one of his colleagues, and they point out to him one or two trifling errors which he had overlooked. They do not see at all what he sees so plainly, that a new principle of language has been grasped by a hitherto discouraging pupil. They only see that a word is misspelled or an s omitted, and kindly call his attention to the fact. He hears many of his fellow-teachers reply when interrogated, "I teach history, geography, physiology, and language," as if all these should be anything but parts of language, and he hears, perhaps has even told it himself in the early days before he realized its gross untruth, that stereotyped old falsehood, "Oh, we teach just about what they do in the public schools."

Out of school hours he goes, partly for the love of it and partly because he knows no one has a right to teach language to the deaf who has not himself wrestled with a foreign tongue, to a Berlitz school, or to some other place where languages are supposed to be "taught." Here again it is the same old story—the same lack of appreciation of the difficulties to be encountered. He finds people "taking" French, German, Italian, Spanish, sitting possibly two hours out of a week under some native professor, placidly waiting for his tongue to descend upon them, and feeling themselves decidedly ill-used when, at the end of a term, they begin to realize that the operation resembles rather a slow, damp fuse than the pentecostal fire they had expected. If inclined to cynicism

one may divide the people who throng such schools and classes into three groups: first, those who are preparing to teach or translate, and who hope to earn a dollar for every foreign word they learn; secondly, those whom business or pleasure leads to travel and who hope to save a dollar thereby; and last, but not least in point of numbers, those who take up the study of languages because it is a fashionable thing to do, a cheap and easy way of appearing literary—a fad. Amongst these three groups, or evolved sometimes from the first two, are scattered a few exceptions—men and women (usually in shabby clothes, for one cannot buy both books and clothes out of a slender income) who are quixotic enough to study merely for the love of study, merely because they cannot help it, because they cannot live by bread alone. The love of books has come down to them as a family inheritance from fathers and mothers who, very likely, also wore shabby clothes, for those who possess this treasure seldom possess any other—nor do they need it. Not one of them would exchange it for all the wealth of all the Vanderbilts. But it is a stinging satire upon our American culture that the one question with which these men and women are continually bombarded is, “What do you study for? What good is it going to do you?” and that they are generally regarded by society with ill-concealed contempt for wasting time and money upon a thing which promises to yield no return in dollars and cents.

This vulgar commercial spirit has crept into our work and we stand in danger of forgetting sometimes the real dignity and grandeur of language. It is well for us occasionally to turn our eyes away from its more minute aspects, with which we deal every day in our class-rooms, and make ourselves remember that language is a great historic growth whose roots reach backward for countless ages; a thing to be revered; a thing worthy of and demanding our highest powers to comprehend; the medium through which all that is heroic in human history and achievement, all that we hope or believe to be of Divine inspiration, has come down to us; a thing which, in the words of one who has devoted a long and honored life to its study, “has helped man in the development of his being, raising him higher and higher in the scale of manhood, being of all his acquisitions the one most fundamentally important, most needful and helpful to everything else he possesses.”

Always excepting moral training, the one thing on this earth most needed by the deaf-mute is the power to comprehend and use written language with facility. That this, as a rule, is the one thing he does not get is our fault—our most grievous fault. We waste useless hours puttering over consonant combinations and vowel sounds, although we know in our hearts that the majority of our pupils (semi-mutes are not referred to) will never speak plainly enough to “be understood of the people,” or we lean comfortably back in our chairs and tell long stories in signs regardless of the fact that the world out into which these children are going knows and cares nothing for signs. We do know that the world uses and understands written language; that the manual alphabet—that one greatest blessing yet vouchsafed the deaf—is easily and frequently acquired by hearing people, and that, in giving them a ready comprehension of language, we are opening, or at least setting ajar, for these eager souls the doors which lead to the enchanted realm of books.

In a dim, groping way at first; later, with pitiful, ignorant straining, and last, perhaps, with well-founded reproach in their hearts against us, our pupils themselves recognize this need and cry for help. Woe unto us if we fail to answer that cry to the best of our ability. In that last judgment day, about which even the most free-thinking amongst us have at times our secret misgivings, it were better for us that “a mill stone had been hanged about our neck and we had been cast into the midst of the sea.”

Is there a teacher whose heart has not ached in pity, watching the handicapped, unequal competition between some slow, faithful, hard-working congenitally deaf boy of fine natural abilities and some idle, shallow semi-mute who, merely because he has language, easily carries off all the honors and the prizes? Could anything be more pathetic than the scraps of paper, carefully treasured, upon which they have scribbled new words, their unbounded and ill-advised confidence in the help of a dictionary, the poor little note-books they are always making for themselves? Here are a few extracts from one of those note books:

Ananile begged some money at the door. (The girl's dictionary defined anile as “old-womanish.”)

I went to the woods with a collection of girls.

Nuptical- preparing for marriage.

George H. is a vain-glorious boy.

My father is a keen son of trade.

We smile at these absurdities, but 'tis with a laughter akin to tears. One thing they show, however, and it is a thing without which all our efforts are vain—a disposition on the part of the pupil to help himself; a willingness to work.

To accomplish anything in language three things are absolutely necessary: First, self-help; the student must be willing and must expect to drudge—to dig and delve unceasingly. Secondly, he must depend upon and cultivate his memory to its fullest extent, and, thirdly,—less tangible, perhaps, but equally important—he must give free rein to his imagination.

As Mrs. Jo Gargery prided herself upon never taking off her apron, so there are teachers who are forever saying in martyr-like tones, “I am on my feet all day; I almost never sit down in the school-room,” and, like poor little Pip, we wonder who hinders them. The best teacher is not the one who appears to be frantically and breathlessly working himself, but the one who can get the most work out of his pupils, who has the judgment and skill to direct their efforts in the right direction, who can spur their enthusiasm, and make them feel that it is they, not their teachers, who are doing great things. As Frederick Harrison lately said, “Schools and teachers are of use only in so far as they help a student to educate himself.”

“Four million people, mostly fools,” may be only the dyspeptic judgment of a great mind, but one is often forcibly reminded of it when considering educators and their fads. Of all senseless crusades, that of these latter days against the divine gift of memory is the most absurd. Phrases like “mere memorizing,” “only a good memory,” “mechanical work,” “parrot-like repetition,” etc., have become popular, and are eagerly caught up and used with an air of superiority by mediocre teachers who do not in the least know what they are talking about, never having given the subject under discussion any really serious consideration. Harrowing pictures are drawn of the sufferings of children in those early days before kindergarten inanities were introduced, before it was discovered that children were sent to school to be amused—the days when little Henry Clay, Daniel Webster, and Abraham Lincoln carried their books home every night and *worked* over their lessons, not knowing, poor dears, that the teacher should have so simplified it all as to leave nothing for their sharp little brains to do. We are told pathetically how long the hours

were, how cruel the punishments, how hard and impossible the tasks in that dark era.

Perhaps, in some cases. But those of us who were fortunate enough in our youth to attend a district school or one of the old country academies (from which came a harvest of thinkers and workers such as our High Schools have never yet yielded) know that the picture is grossly exaggerated. We know that the enforced quiet which threw us back upon our own thoughts, the strict discipline which taught us self-control, the hard lessons which sharpened our wits to comprehend all these things were good for us, and would be good to-day, as Edward Everett Hale has so ably pointed out, for the boys and girls of this generation who are being wheedled along the path of knowledge, most of them conscious of no higher motive or ambition than to secure at the end of their school course a "soft position," in which the work shall be light, the pay large, and, above all, the social position irreproachable.

We, benighted little heathen, learned the multiplication table by heart, a hard enough task for some of us, but less bewildering certainly and far more satisfactory in the end than some of the mathematical performances of the present day. Here is an example quoted from "The Evolution of Dodd," a book which contains more common sense to the square inch than is usually found in educational works:

These wise ones lay down a law (take up almost any printed course of study and you will find it all laid out in the first and second year's work) that every number must be mastered, in all its possible arrangements and combinations, from the very first time it is taken up. Thus *one* must be considered in all its possible correlations to all the universe and the Almighty himself before two can be touched. You don't believe this? Then sit down to the following, which I clip from the "second year's work" of a "course of study" which lies before me.

"Learn to count to 100 backwards and forwards by 1's, 2's, 3's, 4's, 5's, 6's, 7's, 8's, and 9's, beginning to count from 0, and also from each digit, respectively, up to the one used continuously in each case."

Just buckle down to this for a while and see how it goes. See how long it will take you to master even a title of this, so that you can do it even passably well, and then compare your own powers of mind with those of the little child that you would fain cram with this "course," and see if there is not a reason why the children do not take to this method. I know what you will say, at least to yourselves, "I have no time for such a pile of rubbish." You say well. Neither have the children time for it.

The schools of Germany are always being held up to us as a

shining educational example, but the one thing most used, most relied upon, in German schools is the memory. It was the writer's privilege to visit daily for some months classes of all grades in a city whose schools rank among the first in Germany, and the thing most impressed upon her mind in these visits, aside from the severe discipline, was the enormous amount of memorizing required of the pupils, both in the hearing schools and in those for the deaf.

If one be worldly-minded and frivolous enough to express a desire for riches he is sure to hear from somebody the dolorously pious reply, "Ah! health is better than money;" as if sickness and wealth were inseparable, as if statistics did not prove a much larger average of longevity among the rich than among the poor. In the same way, venture to advocate a judicious cultivation of the memory, and you are met at once with the reproachful, self-righteous exclamation, "I want my pupils to understand what they learn;" as if a thing could not be both memorized and understood; as if, after proper explanation, it would not be much better understood for being memorized.

It is a popular cry in these days that "the teacher should be his own text-book;" but some of us, knowing ourselves to be wanting in the ripe scholarship, the trained judgment, the technical knowledge, and the opportunities for long, patient research which the author of a good text-book (and we have no business to be using any but the best authorities in our schools) should possess—some of us shrink from such a responsibility, and, having written our little treatises and passed our little judgments on the great facts of history and science, we ask ourselves doubtfully, Can it be as well for my class to receive this knowledge in my poor language as in that of a man who has made a life-long study of the subject, a scholar conversant with the best authorities, who knows a thousand times better than I. can what is true and what is false, what is worth being told and what deserves to be left untold?

In our work we are, unfortunately, obliged to make many of our own text-books, but do we not overdo the matter? Are we quite sure, after all, that it is the best thing for our children? If our classes of the eighth, ninth, and even, as sometimes happens, of the tenth grade are unable to comprehend the language of an ordinary text-book, does it not look as if there were something wrong in our way of teaching English?

This matter of the comprehension of language is one to which we do not always attach sufficient importance. Many teachers object to a child's possessing a larger vocabulary than he can use well. They would have him, like Miss Peecher, able to "write a little essay on any subject exactly a slate long, beginning at the left hand top on one side and ending at the right hand bottom of the other, and the essay should be strictly according to rule."

A little essay of this kind is eminently satisfactory if a teacher cares only for examination marks and not at all for the fact that such a system dwarfs a child's mind, narrows his horizon, stifles his imagination, and deprives him of real mental enjoyment.

From the day our children enter until they leave school it should be our constant aim to make them comprehend language at sight, and here we are aided quite as much by the imagination as by the memory. They must learn to grasp the general meaning—to catch the drift of a sentence or a page without knowing the signification of every separate word. There are countless ways of working towards this end. Leave sentences about outside matters in which they are interested (ten to one your dullest boy reads and understands in the daily papers those base ball reports which are to you as Chinese hieroglyphics) on your black-board for days at a time. Descend upon them with a slate full of neighborhood news. Make unexpected jokes, no matter if they are bad, your audience will not be critical. Break off short sometimes in the middle of a lesson to introduce some entirely foreign subject. Such an interruption may ruin that particular recitation, but it will make their minds more alert and receptive, will train them to more nimble mental action. Above all, use the manual alphabet in season and out of season. Spell long stories (stories that require an hour or more in the spelling) and require written reproductions. Grimm's Fairy Tales, Gulliver's Travels, and Charles and Mary Lamb's "Tales from Shakespeare," taken in this way, have given a world of pleasure to one class of very moderate ability.

We all laughed at Mr. Frank Stockton's clever story of the man who hired a listener, but we must acknowledge the truth of that bright satire. Nothing is more rare than the power of appreciation. It is important that our pupils should be able to make themselves understood, but, like travellers in a foreign

country, it is far more important that they should be able to understand others; that they should learn to hold converse with books—to comprehend, even though it be “as through a glass darkly,” the high thoughts of great authors, to feel, in the exquisite lines of Keble—

We the while of meaner birth,
Who in that divinest spell
Dare not hope to join on earth,
Give us grace to *listen* well.

SARAH H. PORTER,
Instructor in the Kendall School, Washington, D. C.

LETTERS TO A BEGINNER.—II.

MY DEAR ALFONSO: I will call you Alfonso, if you do not object; it is a perfectly harmless name. I must call you something, and you know I always did dislike the tag that your respected parents attached to you during your helpless infancy. I have frequently had my resentment aroused by this form of parental transgression, and I have always felt a warm glow of sympathy for that enterprising two-year-old who packed his valise and left the house when he overheard them plotting to call him Obadiah! If you had likewise deserted the old homestead at the time that your nomenclature was being constructed, I would have been equally sympathetic toward you, my dear Alfonso, and would have given you shelter and advice. As it is, I shall have to content myself with giving you advice.

This time it is on the subject of grammar. Having so recently become emancipated from the meshes of Greek roots, you doubtless have a profound regard for anything in the shape of grammar. I once was of that way of thinking myself. Yes; incredible as it may seem to you, I was once a grammarian myself. But I have reformed. My first intention was to divide this discourse into three parts under the following heads:

1. Grammar is of no use to the deaf.
2. Grammar is of no use to anybody.
3. There is no such thing as grammar—of the English language.

But I have abandoned that plan, and principally because the classification itself is disagreeably suggestive of grammar. I prefer rather, if any rule must be followed, to adopt that of

Donnybrook fair—"Wherever you see a head, hit it," and don't stop to note whether it is one of the heads that you selected at the start or whether it shows itself in its prescribed order.

What is grammar, Alfonso? Now don't go into that mechanical definition that you memorized before you had matured sufficiently to understand it, and that you can't understand now that you have matured—to some extent. And as you may feel somewhat at a loss without your stereotyped reply, I will give you a definition: Grammar is a guide-book. In other words, grammar tells us, or ought to tell us, what forms of language are in use among the best writers and speakers. But this information would be of comparatively little value to your pupils. I mean the polished composition, the interminable and exasperating ramifications, which are given school children to parse. If you go into the grammar business at all with the deaf, let me implore you to confine your efforts to the simplest form you can devise or appropriate. Don't unload a job-lot of antecedents and predicates on their uncultured brains. Don't lose any sleep, worrying for fear you have not made clear to your class how to use the objective form of the relative pronoun "who." Do you remember that old moss-grown gate-post near the spring-house on your father's farm? Well, between you and me and that gate-post, I do not care whether my pupils ever find out that there is such a word as "whom" in the English language or not. The word is going out of use even among educated people, and is entirely unknown to the average run of humanity. I have no special animosity against that particular word; I only use it as an example. I teach my pupils "Who are you talking about?" in preference to "Of whom do you speak?" or "To whom do you refer?" And so I would invariably give the preference to the style of language that is best adapted to the pupil's need. But how the grammarians do protest against such things! My grandfather was a staunch believer in adamant adherence to grammatical rules. He made no allowance for possible changes in forms of speech. I remember yet his indignation when he found that my teacher was permitting—even *encouraging*—me to spell "waggon" with one *g*. He could hardly believe it. He did, indeed, recall to mind one man, an illiterate mechanic, who, filled with a desire for new things and not content to meditate quietly upon the matter, must needs flaunt his new-

found knowledge in the face of honest people on a sign announcing that he was a "wagon-maker." And with fine scorn the old gentleman related how a scandalized village decided that he might "wag on" for all of them; they would have naught to do with a person of such unstable character. Rest thee, good grandsire! Had all grammarians the tenth part of thy kindly nature, we could well afford to smile at their foibles in silence.

The grammarians lay great stress upon the "mental training" which the study of grammar is supposed to give, but this is a begging of the question as well as an entire change in the point of issue. Our aim is to find the best and most expeditious way of imparting to our pupils the ability to use and to understand the English language. *The way to learn a trail is to travel it.* No guide-book can compete with experience and training of that sort. Especially is this true when much space in the volume is taken up in telling how the trail ought to run. Fancy a guide-book to Pike's Peak which would use up page after page in an elaborate description of the trail—as it ought to be! Note the triumphant progress of the traveller up the side of the mighty hill:

"Starting from Manitou, the ascent begins at once. Be careful to preserve exactly the proper rate of rise. The Peak is 14,336 feet high. Allowing for the altitude of Manitou, it is easy to calculate just what degree of elevation per mile is necessary and proper. Some persons have affected to teach that we must be governed by circumstances in this matter, and in other particulars which will be mentioned further on. But right is right, and such pernicious doctrine as this would, if followed, soon result in a chaotic state of affairs that every right-minded traveller should pray to be delivered from. Be particular, also, to observe the rules with reference to direction. The traveller must not be misled by the short cuts and by-paths, which are the work of scatter-brained tramps whose only aim, apparently, has been to attain the summit or to catch a better glimpse of the scenery. It is hardly necessary to say that such hap-hazard, impulsive ascents are totally at variance with all method. It is perhaps sufficient to add by way of condemnation that order is heaven's first law."

But I weary of this if the traveller does not. I cannot speak of such things calmly—even grammatically. I am anxious that you should not misunderstand me. You may find certain

forms and methods indispensable and feel utterly lost unless you are anchored to them. All right; tie up to them if you must, but my word for it you will find the confinement both tiresome and embarrassing as time rolls around. I was once instructed by the principal how to teach the word "which." It was to be presented to the class simply as a compound connective. I am not sure about the name of it, but it wasn't anything smaller than that, you may be sure—there's nothing small about grammar any way you look at it. "Which" was nothing more nor less than "and it," "and he," or some such linking of conjunction and pronoun. The sentence given me in illustration was this: "I had a dog which was called Carlo." It was quite apparent, even to me, that this sentence was not materially altered by putting it into this shape: "I had a dog and he was called Carlo." The first sentence presented for my consideration by the class was something like this: "I tied my dog to the fence and he howled." The substitution of "which" for "and he" in this sentence did not appear to be altogether satisfactory, and I noted an exception to the rule. Next came, "I thought it would rain, and it did." This was not suggested by a pupil, but was evolved by myself in the attempt to find whether the rule would work both ways— which it wouldn't, manifestly. A memorandum was made of this also. After that it rained exceptions. Rained? It poured. I didn't have any time to teach, I was kept so busy explaining this new branch of meteorology. I braved the elements for a while, and then I cut loose from my anchor and whirled madly away in the fog. I said we would continue the voyage without any anchor.

I know that my figures of speech are slightly confused, but it has been my misfortune, as far back as I can remember, to get mixed up whenever I tried to discuss grammar. I used to feel that it was my fault, but of later years I have been inclined to think that grammar is the true offender. I swallowed the arbitrary rules when I was young for the same reason that I sometimes swallowed medicine—older people than myself said that they were good for me, and I had no voice in the matter one way or the other. By the time I reached the years of discretion I had such a thorough respect for the authorities grounded in my system that it never occurred to me to question their wisdom. But one day I chanced upon this remark of Elihu, the son of Barachel the Buzite, of the kindred of Ram:

“Great men are not always wise; neither do the aged understand judgment.” It at once struck me that this sentiment might be applicable to the grammarians. This impression has grown upon me until it has become a conviction. In the year 1869 there appeared in the *Galaxy* an article entitled “The Grammarless Tongue,” from which I make the following extracts:

In Latin, Greek, and other inflected languages, the forms of the words of which a sentence is made up present outward signs of requirement which give some hint as to what the grammarians mean by one word governing another. But in English there is no such visible sign; and this arbitrary, mysterious, and metaphorical phrase government is, to young minds, if they are reasoning and not merely receptive, perplexing in the extreme. Even in languages which have a variety of inflection, the words do not govern each other; but they may be said to fit into each other by corresponding forms which indicate their proper connection, so that a sentence is *dovetailed* together. In English, however, with the exception of a few pronouns, one case of nouns, and two tenses and one person of the verb, all the words are as round and smooth, and as independent of each other in form, as the pebbles on the seashore. * * * In English, words are formed into sentences by the operation of an invisible power, which is like magnetic attraction. We have, in speaking or writing English, only to choose the right words and put them into the right places, respecting no laws but those of reason, conforming to no order but that of logic.

Alfonso, the most unsatisfactory job I ever undertook was to teach grammar and at the same time attempt to give reasons for the rules and regulations. The grammarian who is urged to assign reasons would do well and save himself much embarrassment if he would take the lofty ground assumed by Jack Falstaff:

What, upon compulsion? Zounds, an I were at the strappado, or all the racks in the world, I would not tell you on compulsion! If reasons were as plentiful as blackberries, I would give no man a reason on compulsion, I.

I recall an amusing grammatical episode. In a certain school a number of the teachers used and taught the colloquial expression, “I would like for you to do thus and so.” As soon as the pupils changed teachers, they were at once instructed to omit the *for* from the sentence. If the teacher was asked for his reason, he answered dogmatically that “like” is a transitive verb, and hence the preposition is superfluous. This was supposed to be conclusive, if not satisfactory. Satisfactory it was not, as the erudite Mrs. Gamp would say. How the

grammarian would parse the "you" in that sentence does not appear. It cannot be the object of *like*; the thing liked or desired is "for you to do thus and so." If it is customary among the more cultured to leave the "for" to be understood that is another thing, *and the only thing to be considered*. Whatever may be the law in ethics, we may be sure that in the use of language "whatever is, is right." The English language does not conform to rule. It is as uncertain and variable as the trail to the Peak. Here it is a smooth bit of road; there it turns aside to catch the melody of some waterfall; again, it avoids some inequality of surface; here it is direct, there circuitous; now a sudden rise and then a level strip. No man but the one who has often travelled it can walk secure and know just how he will face at the next turn. The slang, the by-way of to-day, becomes the accepted usage, the beaten path of to-morrow. You may object that while this may be true in *belles-lettres*, it cannot apply to the simple, methodical composition of our pupils. I think it does apply, Alfonso: I think it does. I have been pretty much of that opinion for a good many years, and I shall await with what patience I can summon your conversion to the same belief.

POMPANO.

SCHOOL ITEMS.

Illinois Institution.—A "Columbia Dish-Washing Machine" has been purchased, which, the *Advance* says, gives great satisfaction to the girls who formerly had to wash by hand the several thousand pieces of table ware used daily. The new machine "washes, rinses, and dries the plates, vegetable dishes, cups, saucers, etc., and does the work well without the use of soap. It does all this as rapidly as one person can pass the dishes to it and another take them away from it, and yet does not break, nick, or crack them. The machine is expensive at first cost, but Dr. Gillett said recently that if he could not get another he would not consent to part with this for three times the amount he paid for it."

Iowa School.—We are happy to record the fact that the title of the school, in consequence of the earnest efforts of its

authorities, has been changed from "Institution for the Deaf and Dumb" to "School for the Deaf."

Mr. Wyckoff has recently made a tour of inspection of other schools for the deaf.

La Crosse School.—Miss Viola Taylor has been obliged to resign her position on account of illness. Miss Minnie E. Taylor takes her place.

Manitoba Institution.—A governmental investigation of this Institution has recently been made at the instigation of a few dissatisfied contractors and disaffected *employés*. The result was the entire disproof of the charges made, and the verdict that the administration of the Institution has been faithful and efficient under very trying circumstances.

The publication of a neatly-printed eight-page monthly paper called the *Silent Echo*, and edited by Mr. McDermid, was begun April 29, 1892. It is illustrated by the pupils, plate engraving having been introduced as a branch of instruction in the Industrial Department.

Michigan School.—The vacancy occasioned by the resignation of Miss A. A. Hendershot has been filled by the appointment of Miss Kate Cook.

National College.—On Presentation Day, May 4, 1892, the twenty-eighth anniversary of the College, Mr. Robert P. McGregor, B. A., who was graduated twenty years ago, and Messrs. Charles R. Ely, B. A., George R. Hare, B. A., Oscar Vaught, M. A., Guy M. Wilcox, B. A., Joseph A. Tillinghast, B. S., and Wirt A. Scott, B. A., Normal Fellows, were presented as candidates for the degree of Master of Arts; Messrs. Paul Lange, Jr., Benjamin F. Round, Martin M. Taylor, and Oliver J. Whildin for the degree of Bachelor of Arts; Messrs. Amos Barton and Ellsworth Long for the degree of Bachelor of Science, and Miss Alto M. Lowman for the degree of Bachelor of Philosophy. The seven persons last named are members of the present Senior class. Miss Annie M. Jameson, who has pursued the Normal course with distinguished success, was not a candidate for a degree, but was presented as

candidate for a suitable diploma. In addition to the usual orations and dissertations by the candidates for the Bachelor's degree, Mr. Hare read his Normal thesis, and addresses were made by the Hon. John W. Noble, Secretary of the Interior, the Hon. Charles E. Hooker, M. C. from Mississippi, and President Gallaudet.

All the students but one who are now pursuing a Normal course have already received appointments as teachers in various schools for next year.

New York Institution.—The honorary degree of Master of Arts has been conferred by the National College upon Professor Enoch Henry Carrier in recognition of his valuable services as an instructor of the deaf during the last twenty years.

Ohio Institution.—Mr. Knott has resigned the position of superintendent, and Mr. Hartnett that of steward. Mr. J. K. Pollard, formerly State Senator from Adams county, has been appointed to the latter office. Mr. Knott's resignation does not take effect until July 1, and his successor has not yet been appointed.

Pennsylvania Institution.—The *Silent World* of May 12 contains another interesting letter from Mr. George Gilpin (see the last number of the *Annals*, page 162), written from Florence, Italy. He says:

MY DEAR MR. CROUTER: I have given much thought to the question in your letter of March 7th, namely, "What proportion of our pupils should we teach orally?" and I confess that I feel at a loss how to answer it. I don't think my visits to European schools help me to any decision, for the reason that the results achieved at home by either method are so far ahead of anything I have seen here. It seems to me the solution of the question is rather to be looked for at home, in the experience of such schools as Northampton and our own. Certainly the opinions of men of such experience as Messrs. Kirkhuff, Booth, and Hurd ought to have, and has with me, very great weight, especially as they have all been so long and closely identified with the old system; and as you say that you yourself feel that we ought to do more than we are now doing, I should be very willing to join in advocating any reasonable extension of our oral teaching.

But this I feel very strongly, as I am sure you do, that we ought to err on the safe side, and go too slowly, rather than incur the risk of having to retrace a single step.

As you say, when an old and conservative institution like ours begins to strike out in a new direction, all eyes are upon it, and it behooves us to know that we have firm standing ground for each advance. Every other institution for the deaf, whether at home or abroad, seems to me to be simply in the position of an advocate, and to speak only with the weight of an advocate, claiming all good for its own system and allowing little or none to its opponents. Our institution, on the contrary, holds a position truly judicial, and therefore impregnable. Fairly trying both systems and doing the best work in both, without prejudice to either, but carefully weighing the good of each by its results, when she does speak it will be with all the force of an impartial judge in his final summing up after hearing argument and testimony on both sides, and, for that reason, I am especially anxious that she shall be very sure as to the law and the facts before deciding. If, in the meantime, we decide to make some extension of the oral work, will not the question of the buildings practically decide it for us? Given four department buildings, will not the first change naturally be to use two of them instead of one for oral pupils—making something like an even division of the pupils?

Personally, I incline to the belief that the proper percentage lies well within the extremes advocated by either party.

Whenever opportunity has offered, I have discussed with those in the work here the relative merits of the two systems. In Germany, all with whom I spoke claimed that the oral method was the best for all cases—that even the dumbest got something of substantial advantage from it.

At the Institution in Rome, also an oral school, I found on the contrary, and quite to my surprise, a wide-spread opinion that for a portion of the pupils the manual system would be better.

As to what this percentage actually is, there is considerable difference of opinion. Some thought eighty per cent. could profitably be taught orally, some sixty, while Padre Gioga, a very intelligent young priest, who showed me about the Institution on both my visits, thought only forty or at most fifty per cent.

He told me that he had written a paper in support of his views for the Conference of Teachers of Deaf-Mutes, and he assured me that many teachers throughout Italy held the same opinions.

If, said he, a child fails to acquire speech and has difficulty in understanding spoken language, all of which often happens, he gets little or nothing. For him the easier system would be much better.

I told him that in Philadelphia we taught in both ways, keeping the pupils of the two schools quite apart, and that when we found a pupil did not make satisfactory progress by the oral method, he was transferred to the manual school, and often with good results.

He was much interested in my account; said this was as it should be, and regretted that they had not the same system.

Washington State School.—The publication of a handsomely-printed eight-page semi-monthly periodical called the *Washingtonian* was begun May 2, 1892, under the editorial direction of Mr. J. C. Watson.

— since then Mr. L—— has depended entirely upon speech-reading, finding it much more satisfactory than the aids to hearing formerly employed. Thanks to the skilful training he has received from his wife, he is able, in his office duties, to read without difficulty the speech of any person who articulates well. In court, where it would be difficult and sometimes impossible for him to follow all that is said, especially the taking of evidence, etc., he has an assistant who sits facing him, and repeats, without voice, every word that is spoken by lawyers, witnesses, and judge. His own voice is good, so that with no other aid than that above mentioned he is able, in the trial of a case, to attend to the examination and cross-examination of witnesses, interpose objections to evidence, make arguments to the court and jury, and, in short, do all that any lawyer must do in the trial of a contested case. He has a large and successful practice.

The Rapidity of the Manual Alphabet.—A series of tests of the rapidity with which the manual alphabet can be used was recently made in the Minnesota School, and is reported in the *Companion* of April 9. The lowest rate was that of a pupil eight years old who was in his second year at school; he spelled 89 words a minute, reading from a school-book. A pupil in an advanced class, reading from Thalheimer's English History, spelled 133 words a minute, and a teacher, from the same book, 148 words. "In every test the spelling was perfectly legible, so that it could be readily followed by one fairly expert in the use of the finger alphabet." The editor of the *Companion* compares the rate of rapidity attained in these tests with that of public speakers and stenographers, showing that the rate of the teacher above given is only two words less than the average rate of public speaking (150 words a minute), while eight of the tests exceeded the average rate of a first-class office stenographer (100 words a minute).

Mr. Arnold's "Lip-Reading."—The Rev. Thomas Arnold has supplemented his "Method" and "Manual" of deaf-mute education by the publication of a pamphlet on "Lip-Reading," treating the subject more fully than in his previous works. His methods, the result of his own experience and study, coincide in general with those of the leading European authorities, and deserve the attention of all teachers of speech.

In saying that he is "the only writer in our language whom he can discover that has practically applied lip-reading in detail to all the phonetic elements of the language in teaching speech to deaf-mutes," Mr. Arnold overlooks Professor A. Melville Bell's excellent little manual of "Speech-Reading," noticed in the *Annals*, vol. xxxv, page 155; his treatment of the subject, however, is quite different. The pamphlet may be obtained of the author, 27 St. Paul's Road, Northampton, England. The price, including postage to the United States, is fourteen cents, which may be sent through the postal money-order office.

The Verrier Audigène.—In the last October number of the *Annals* we mentioned a new hearing tube invented by Mgr. Verrier, which was said to have worked wonders in the school at Bourg-la-Reine. Since then the instrument has been patented under the name of *Audigène-Verrier*, and a great deal has been said in its favor in the French periodicals. Mr. A. F. Fehmers, Vice-Principal of the Rotterdam School, has visited Bourg-la-Reine, and in a pamphlet describing his visit (*De Audigèen-Verrier; haar toepassing in het Meisjes-Doofstommen-Instituut te Bourg-la-Reine*, Rotterdam, 1891) confirms the statements of Mr. Claveau and Mr. Bélanger that it is far more powerful than any other hearing tube known, and expresses the opinion that most persons regarded as totally deaf really possess some degree of hearing, which may be aroused and developed by the aid of this instrument. The *audigène* is still used in the Bourg-la-Reine School with *all* the pupils, and Mr. Bélanger in the March number of the *Revue Française* urges that it shall be so used in all schools.

Professor Gordon has recently been testing the Verrier *audigène* with the students of the National College, and we regret to say that the results thus far indicate that the instrument is less powerful than the ordinary English conical hearing-tube!

"*Education of Deaf Children.*"—Of all the immense quantity of evidence on the education of the deaf laid before the late Royal Commission of Great Britain, that of President Gallaudet and Dr. Bell was the most important and weighty. It was published, together with some of the accompanying exhibits, in the Report of the Commission, noticed in the *Annals*,

vol. xxxiv, pp. 300–307, and vol. xxxv, pp. 160–163. It is now republished by the Volta Bureau, together with other matter, under the title of “Education of Deaf Children,” making a large octavo volume of 406 pages, which has been carefully edited by Professor Joseph C. Gordon, of the National College. In this publication the Volta Bureau has rendered an important service to the profession. It not only presents the evidence of President Gallaudet and Dr. Bell in a more accessible form than the Report of the Commission, but has the further advantage of a valuable Introduction by the editor, a much fuller presentation of the numerous publications and other matter submitted to the Commission by President Gallaudet and Dr. Bell, some additional matter not submitted and not previously printed relating to the United States Census of 1880 and the Massachusetts Census of 1885, genealogical charts, an exposition of Visible Speech with accompanying charts, statistics of schools, etc., and, last but not least, a good Index, rendering the whole available for reference.

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President Gallaudet's Glasgow Address.—The British *Quarterly Review of Deaf-Mute Instruction* for April, 1892, contains an able review of President Gallaudet's Glasgow Address on the Combined System of Instruction.* The author, Mr. A. Farrar, Jr., writes from the point of view of a moderate oralist; he seeks, in his own words, “not to decry the manual method, but to indicate some of its limits and imperfections; to emphasize its admitted inability to secure for the deaf the largest measure of benefit in their relation to the hearing world and their own intellectual needs, and on this ground to justify the exclusive practice of the oral method in the majority of cases.” Were it not our invariable rule (out of regard to the large number of persons who are subscribers to both periodicals) to refrain from reprinting in the *Annals* what has already appeared in the British *Quarterly*, we should be glad to quote the review in full; as it is we limit ourselves to this extract, which presents *in nuce* one of the strongest arguments for the exclusive use of the oral method in the case of such pupils as can profit by it:

It seems to me that the true value and place of speech in deaf-mute education is as yet hardly realized, especially in America. The mere

* Published by the Volta Bureau, Washington, D. C. Extracts are given in the *Annals*, vol. xxxvi, pp. 255–256.

ability to speak and read the lips may, and rightly, be the chief object to be aimed at, but it is not the entire *raison d'être* of the oral method. The California resolution appears on the surface to secure that every scholar shall have the opportunity of learning to speak; but what guarantee is there that this will be done in the only way in which speech can become of real value—by making it the basis, medium, and end, and not merely, to use a hackneyed term, an accomplishment? It is all very well to make the reservation in regard to the sign-language in the combined system, that it is employed, not as an end, but as a means in the acquisition of language. But it is not to be so easily controlled. It will and must occupy in the mind the place which speech, to exercise all its functions, alone should fill. Under such conditions, and sundered from all the mental habits they foster, how can speech become anything else than a lifeless set of mechanical movements, and what wonder if the deaf-mute shows so little inclination to use it?

“*Values in the Education of the Deaf.*”—President Gallaudet has a forcible article with the above title in the *Educational Review* for June, 1892 (New York, Henry Holt & Co.). He considered the relative importance of the various elements deserving a place in the work of teaching the deaf, and shows how, in his judgment, each should be related to the others and to the composite unit. While his general conclusions with respect to methods of instruction are not different from those expressed in his Glasgow Address, the subject is broader and is treated from another point of view. He sums up his estimate of “values” as follows:

(1) That the language of gestures should never be banished from any school; (2) that all who undertake to teach or train the deaf should master this language; (3) that at the same time gesture language should be regarded as a means, never as an end; (4) that a careful and prolonged effort should be made to teach every child to speak; (5) that the education of every one found capable of acquiring speech should be so conducted as to promote facility in speech to the highest degree possible, without sacrificing those other objects of education which are admittedly of more consequence than speech; (6) that every child found incapable of success in speech should be taught by the manual method; (7) that moral training should be carefully attended to and that religious instruction of an undenominational character should be afforded; (8) that industrial and physical training should have prominent places; (9) that artistic ability should be carefully fostered and encouraged; (10) that wherever sufficient hearing remains to distinguish articulate sounds, pains should be taken to train and develop this faculty, so that, if possible, it may become a channel of intelligent communication; and (11) last, but by no means of least importance, that all teachers of the deaf should be highly-educated persons, carefully trained for their profession, and should possess in no small measure that disposition which “is not easily provoked,” which “seeketh not her own,” but endureth all things, and is kind.

Church Work.—The Rev. Thos. Gallaudet's "Nineteenth Annual Report of the Church Mission to Deaf-Mutes" gives full details concerning the progress of the important work in behalf of the adult deaf carried on by the Episcopal Church. The report also includes an account of Dr. Gallaudet's pilgrimage of love in behalf of similar work in Ireland, Scotland, and England, and an eloquent address delivered by Dr. Isaac Lewis Peet on the nineteenth anniversary of the Mission. The mortgage on the "Home" has been removed, and legacies have been received during the past year which will form the basis of an endowment fund.

A mission to the deaf has recently been opened in Boston, Massachusetts, under the auspices of the Episcopal City Mission. It is conducted by the Rev. S. Stanley Searing, late Rector of the Church of the Good Shepherd. It has its headquarters at St. Andrew's House, 40 Chambers street, which is also the home of the Gallaudet Society.

The Seventh Conference of Principals.—The following circulars, relating to the Seventh Conference of Principals and Superintendents of American Institutions for the Education of the Deaf, have been issued since the last number of the *Annals*:

SECOND CIRCULAR.

NATIONAL DEAF-MUTE COLLEGE,
WASHINGTON, D. C., April 26, 1892.

The Standing Executive Committee, after consultation with Mr. John E. Ray, Superintendent and Local Committee, have concluded to change the date of the meeting of the Conference from July 9 to August 13.

This change has been decided upon mainly because the low rate of a single fare for the round trip could be obtained only in August, in connection with the triennial conclave of the Knights Templar, which will be held in Denver early in that month.

The Colorado School through Mr. Ray extends a cordial invitation to Principals and Superintendents, with their wives, and to others who in pursuance of the terms of the call for the Conference would naturally be expected to attend as honorary members.

Arrangements will be made through Dr. Gillett for a sufficient number of Pullman cars, to start from Chicago, for the accommodation of those whose route to Colorado will take them through that city, and *it is important that all wishing to secure places should communicate with Dr. Gillett at Jacksonville, Ill., promptly, before May 10, if possible.*

The reason for this early action grows out of the fact that a great number of cars will be used by the Templars, and it will be necessary to make engagements very soon in order to secure good accommodations.

A third circular will be issued, giving full information as to the manner in which railroad tickets must be bought, routes selected, etc., as soon as these details are furnished by the railway authorities.

E. M. GALLAUDET,
Chairman.

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COLORADO SCHOOL FOR THE DEAF AND THE BLIND,
COLORADO SPRINGS, COLO., *May 2, 1892.*

The Seventh Conference of Principals and Superintendents of American Institutions for the Education of the Deaf will convene with this School, Saturday, August 13, 1892, at 2 o'clock P. M. The Principals and Superintendents of all American schools for the deaf are entitled to regular membership in the Conference. Members of Boards of Trustees, State Officers, ex-Superintendents, ex-Principals, and such other persons as are specially invited by the Local Committee, will be received as honorary members.

The time selected for the Conference is such as to enable delegates to take advantage of the very low rate of one fare for the round trip, offered the Knights Templar Conclave, which meets in Denver, Col., about this time.

By the authority of the Board of Trustees of our School, sanctioned by the Governor of Colorado, I have great pleasure in extending to you a most cordial invitation to be present.

If you desire to present any paper to the Conference, or any subject for discussion, you will confer a great favor by communicating at an early day with the undersigned.

Please kindly indicate as soon as practicable whether or not you will be present, and how many representatives will attend from your school.

Sincerely yours,

JOHN E. RAY,
Local Committee.

Since these circulars were issued it has been found desirable, in view of the railway arrangements, to change the day of meeting to Saturday, August 6. Dr. Gillett has arranged for a special fast train of vestibule Pullman cars, including a baggage car, a dining car, and several sleeping cars, to leave Chicago on Friday morning, August 5, arriving at Colorado Springs on the evening of the following day. It is probable that, through the competition of the railroads, even lower rates of fare than those already announced—possibly so low as \$12 for the round trip from Chicago—may be secured. The arrangements made by Dr. Gillett are such that the members of the Conference and their friends will have the benefit of whatever reduction is offered to the Knights Templar. A circular giving full particulars will soon be issued.

The Second Meeting of the American Association to Promote the Teaching of Speech.—In consequence of the change in the time of meeting of the Conference of Principals above mentioned, the time of the Second Summer Meeting of this Association has been changed. It will be held from June 29 to July 8, inclusive; the place will be as announced in our last issue, Crosbyside Hotel, Lake George, New York. A circular giving full information concerning railway rates, hotel accommodations, and other matters of interest, will soon be issued.

Publications Received.—We have received the following publications, in addition to those mentioned elsewhere in the present number of the *Annals*:

BANCHI, VITTORIO, d. S. P. Tommaso Pendola e il suo Istituto. Notizie Storiche. [Historical Sketch of Tommaso Pendola and his Institution]. Siena: S. Bernardino, 1891. 8vo, pp. 48.

GALLAUDET, EDWARD M., Ph. D., LL. D. Our Profession. [Reprinted from the *Annals* for January, 1892.] Washington: Gibson Bros., 1892. 8vo, pp. 8.

HAVSTAD, LARS A., M. A. How the Deaf Converse with Each Other in Norway. [Reprinted from the *Annals* for April, 1892.] Washington: Gibson Bros., 1892. 8vo, pp. 8.

RIEFFEL, Abbé ED. Étude sur les Sourds-Muets [Essay on Deaf-Mutes]. Epinal: C. Froereisen, 1891. 12mo, pp. 56.

Journal of the Fanwood Quad Club (of Deaf-Mutes). New York: *Deaf-Mutes' Journal* print, 1892. 12mo, pp. 48.

Minutes of the Fourth Kansas Teachers' Convention, held at the Kansas Institution, September, 1891. Olathe, Kansas: Printed at the Institution, 1891-92. 8vo. pp. 47.

Proceedings of the First Reunion of the Graduates and Former Pupils of the Missouri School, September, 1891. *Deaf-Mute Record* steam print. 8vo, pp. 22.

Reports of the First, Second, Third, Fourth, Fifth, and Sixth Reunions of the Wisconsin Deaf Alumni Association. Delavan: W. G. Weeks, 1891. 8vo. pp. 64.

Reports of Schools, published in 1891: Cambrian (Swansea, England), Iowa, New South Wales; published in 1892: Emden, Liverpool, Lyons, Midland (Derby, England), National, New York, Rhode Island.

E. A. F.

ADVERTISEMENTS.

ORAL TRAINING SCHOOL for Teachers of the Deaf, established in 1881. Course of training in Bell's mechanism of speech, in methods of instruction employed in American and European oral schools, together with some original thoughts of Miss Garrett's in articulation, lip-reading, and

language work. She thinks there is too much coming down to the deaf child's level instead of raising it to our standard of speech. For example, in trying to show words plainly on the mouth she thinks teachers often fall into the error of giving the wrong accent; break up the rapid sequence of syllables; speak too slowly. These errors produce imperfect speech and lip-reading. Words can be plainly shown without falling into these faults.

Address Miss EMMA GARRETT, Home for the Training in Speech of Deaf Children Before They Are of School Age, Monument Avenue, near Ford road, Philadelphia.

A TEACHER of articulation of ten years' experience wishes to communicate with parties who desire such a teacher. Best references. Address ARTICULATION TEACHER, care of the Editor of the *Annals*, Kendall Green, Washington, D. C.

WANTED, a position as teacher by a young man, a college graduate, partially deaf, and wholly conversant with the sign-language. Best references. Address XXX, care of the Editor of the *Annals*, Kendall Green, Washington, D. C.

A YOUNG WOMAN, a college graduate, semi-mute, conversant with the sign-language, desires a position as teacher or supervisor of girls. Best references. Address GRADUATE, care of the Editor of the *Annals*, Kendall Green, Washington, D. C.

AMERICAN ANNALS OF THE DEAF.

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THE PRESENTATION OF LANGUAGE.

THE absorbing question of to-day, in our profession, is how to teach the English language. Every one of us recognizes the difficulty and all are trying to find the best way. We are accustomed to say, or to hear it said, that the English language is foreign to the deaf child, that his natural or native language is pantomime or sign-language; the same would be true of any other tongue. Whether it be foreign or natural does not enter into the consideration in this paper. In the discussions of the *how* to teach, both in our profession and outside of it, the tendency is to overlook the more vital consideration of *what* to teach. All the aids and ways we employ have in view this one object—teaching the English language. The design of this paper is to describe a method of presenting language which in its simplicity and naturalness seems excellent, and is superior to many of the plans in vogue.

In this plan two self-evident truths must be considered: that a deaf child has no language, and, as a corollary, he cannot give what he does not possess. It is based upon these two propositions: First, that the pupil receives his language from his teacher, and, second, that he can take in his knowledge in the form of complete thoughts as well as in simple ideas.

Grammarians tell us that a word is the sign of an idea; that a sentence is a combination of words expressing a complete thought. It must be remembered that the difficulties of the deaf are not in the mastery of ideas, but in the arranging of them in the forms which express complete thoughts. They are, proverbially, accurate spellers. It is always a cause of comment by public school teachers, in visiting a school for the deaf, that their spelling is correct; and it is a source of wonderment in their minds how and why this is so, while they have

so much difficulty at this point. The explanation is easy: they are taught correct spelling; they have the correct forms in their minds; they have learned the words by sight. If the orthography be faulty, they do not recognize the word; it is a new one, expressing another idea, if it expresses anything to them. Hearing children bring to their aid their knowledge of sound, and through this avenue get the meaning; not so with the deaf ones. The teacher has given this accurate knowledge of orthography; the children have learned this vocabulary accurately, a word at a time. This holds in all our methods as regards ideas, but it does not obtain when we explore the wider realm of complete thoughts.

Every teacher knows the utter blankness of the deaf child's mind as he enters school. He knows all the difficulties to be met and mastered; ideas are to be presented and the names written and learned, and so on. Thus far in the work the plans followed are good, but right here come in the multitudinous questions of how now to proceed. Each teacher has his own method of procedure. In the near future the child has accumulated a large stock of ideas and their proper signs, and then trouble begins.

When new subject-matter is presented, whether it be by pantomime, by signs, by actions, by the use of objects, by speech, or by any other means, the pupil is expected to translate into the English language that which has been given to him as above. At this point is a block of stumbling to many teachers. They expect from the pupil something which he does not possess, that which he has never had; in short, a translation into English. No instructor has a right to demand this of a pupil; nevertheless the pupil is called upon to do the work, and of course he will do the best he can. He has all the ideas necessary to express the thought, but he does not know how to put them together in the forms which our language requires. It must be remembered that the thought is not in the words, but in the arrangement of them.

This pupil, who began his work with a mind as free from all knowledge of language, of "mutisms," and all other peculiarities, as a sheet of white paper, begins to fumble around among the disjointed ideas, the signs for which he has learned correctly, to find enough words to express the thoughts which have been presented. He does his best, but of course these ideas will be written in a promiscuous and un-English

order, and chaos prevails. Then begins the work of transposing words, of fixing up this faulty work, until both teacher and pupil despair of ever getting good language. The English is mixed. Our articulation friends attribute this sad state of affairs to the sign-language and the generally mistaken sign or manual methods. Then our sign friends point to the efforts of the poor Indian, or the foreigner, to acquire our idioms and say, Not so, for they have hearing, and signs are not used. A Chinaman recently had the following notice inserted in a Santa Barbara, California, paper, and he was not accustomed to the sign-language:

I have a tame cat is lost on the 23th of april it is about nine pounds his breast all are white the hands and legs both are white but his behind leg outside part have a Gray Color and his back are all gray but the back have a white blue spot on it his muzzle is red and his head is light black his nake have a iron ring on it and with six chinese money to tie it tight on the iron ring in his nake if any people know where he was bring back to me I will prefer to give him two dollars for reward.

We are looking for the reason why we meet with such almost insurmountable difficulties in teaching the idiomatic use of our language to a people who have no language. To the mind of the writer the weak point in our system is this: We demand of our pupils that which they do not have. We expect of them, in the form of translations, expressions for complete thoughts which they have never seen, which they have never been taught. This brings us to our first proposition—that the pupil should receive his language from his teacher.

What is language? It is a medium through which we look to see the thought behind. It is a window. As I sit at my window I look out. I see the trees, the flowers, the birds. I do not see the glass; it is simply the medium through which I look. Our pupils are prone to look at the words of a sentence and try to find out what they individually mean. They are looking at the glass, not at the trees and flowers and birds. To remedy this weakness, to teach them to think things and not words, to think in complete thoughts and not in their parts, is the desideratum. When we see a horse, we think of him as a horse, not as an animal with four legs, a mouth, a nose, eyes, ears, and tail. When we see a city in the distance, we see it as a whole; as we approach, it we see its steeples, houses, and streets. Even so in presenting language

to these people, who have no language, it should be presented to them as it is to us, in its completeness.

This is the plan :

The teacher gives the subject-matter, whether it be primary work or advanced, whether it be the simplest language or the more complex, by pantomime, or by the sign-language, or by the use of objects, or by actions, or by speech, or by any other means, so that his pupils have an accurate, definite understanding of what was said. Then the teacher writes on the black-board. He states in pure, smooth, idiomatic English what the pupils already have seen—what they know. He makes it a point to use the best expression of which he is capable, with strict regard for all the rules which pertain to correct writing.

As he writes, the pupils follow with their eyes fixed upon the expressions before them, with their attention riveted and intense, with their power of memory exercised to its limit, for they know that this is but a panoramic view passing before them of that which they have just witnessed, by whatever means it may have been presented. They are not allowed to ask any questions as regards new words or new expressions.

The thoughts have already been presented; this, now, is the expression. After a moment's look the work is erased. The pupils reproduce it. They have taken it in as a whole. They have English language smooth, accurate, idiomatic. This plan presupposes that the pupils did not have the expressions desired; it has not required of them that which they did not have; the teacher has given them the correct forms and they have taken them in their completeness, and appropriated them to their use. The new expressions belong to them. The true principles have been kept in view. Ideas have been presented and their names written. Necessity for certain expressions has been created, and the forms provided. By this means the closest attention of the class is secured, the most rapid thought developed, and memory exercised.

No method of presenting language that ever we have seen is so intense, or develops every faculty of the mind to so great an extent. Since this plan has been in operation in the Nebraska school we have had the smoothest idiomatic language, the best monthly letters in the history of the school.

The demand of Helen Keller upon her teacher for thought, complete thought and not individual words, is directly on this line.

The teacher can accomplish so much more, can increase the amount of language given, over any other way with which we are familiar.

Some may say that this destroys originality ; that it is simply memory work. To a certain extent this is true ; but it must not be forgotten that we are dealing with people who have no language with which to be original, and that it is memory, not of words, but of thoughts presented.

In the construction of a house, the carpenter has his framing done before he builds. When the time to erect the structure comes, he knows where to find the frames which fit. He will put door-frames in door-ways, and window-frames in window-openings. He may break or mar some of them ; if so, he must make new ones. This is true of this method of teaching. The pupil may mar and disfigure and forget his forms, and probably will ; if so, he must draw upon his source of supply for others ready made, and not be obliged to look up the lumber, hammer, saw, and nails to make them. By this means the pupil need not grope about in the dark among his many ideas to find the forms he wants. They are in the mind ready made, and when the necessity for their use comes up he knows where to find them.

JOHN A. GILLESPIE, M. A.,
Principal of the Nebraska Institute, Omaha, Neb.

HEREDITARY DEAFNESS.

If the laws of heredity that are known to hold in the case of animals also apply to man, the intermarriage of congenital deaf-mutes through a number of successive generations should result in the formation of a deaf variety of the human race.—*A. G. Bell, Memoir*, p. 4.

There is no doubt in the minds of unbiased men, who have studied and observed, that these laws do apply to man as well as to other animals. Yet many believe Dr. Bell's position is untenable. Certain characteristics are more readily transmissible than others. It is claimed that certain peculiarities defy transmission, and deafness is classed with these. No analogy from the lower animals can be conclusive until it is proved that these animals may inherit the peculiarity in question, *i. e.*, deafness. Concerning deafness, Ribot says :

To be congenitally deaf and dumb exerts a well-known and unfortunate influence on the development of the intellect. * * * If this infirmity is transmissible, heredity may be said to penetrate into the very essence of intellect. But this form of heredity is disputed.—*Heredity*, p. 42.

Heredity.—There is one law of transmission under which all life has been propagated since vitality has existed—the law of heredity or uniformity. “Like begets like,” “bred in the bone,” and other popular expressions, show the general belief in the principle of inheritance. The breeder, the theologian, the scientist, alike acknowledge the uniformity of descent. History, so far back as the study leads us, shows that the differences between the races have been clearly marked. The Caucasian, the Turanian, and the Negro, each reproduce characteristics true to his race. The negro is not produced by the white man, nor does he ever see the essentials of that race in his offspring. Let us leave the races and go more into detail. Instances of inheritance of external structure, intellect, idiocy, mental diseases, idiosyncrasies, anomalies, moral nature, and predisposition to vice in all its phases, show that heredity is not only general in its demands, but controls the minutest peculiarities.

When we consider the delicate and intricate nature of the ovum, we can realize somewhat of the power of heredity, and we need not wonder that it has many exceptions. The slightest accident to the embryo may result in deformity or death. Placing a hen’s egg on end during the period of incubation produces a monstrosity. Even the most insignificant cause produces an effect apparently out of all proportion. Heredity is the rule, but it has never been fully realized. Notwithstanding the great similarity that exists between individuals of the same species or variety, no two organized bodies are ever alike. The differentiation of all life is so clearly marked that the courtiers of Alfonso X. sought in vain for two leaves alike. Diversity is constantly appearing, but, as it occurs in every conceivable way, we cannot say it is controlled by any law. Under such a law we must have certain forms under which variations appear, certain ends toward which we can expect the tendency to exert itself. To a great extent the exceptions to heredity are the results of prenatal influences and transformations of heredity. We may regard other exceptions as fortuitous variations.

Heredity being the rule, what are its relations to spontaneity? When a variation has occurred, how will heredity act in regard to the infraction of the law of transmission? There is a decided tendency to perpetuate the variation as an hereditary one, but this is often against great odds. The general opinion is that, in a few generations, the variation will run its course and the normal type reappear. This opinion is, to a great extent, correct. Haeckel* has well defined heredity as *memory*, and variation as *perception of new relations*. There is a strong tendency to perpetuate a variation as hereditary, yet the memory of a long ancestry is so potent that many reversions will take place. If the divergence in question does not occur in a number of individuals, and if a rigid selection is not made for a number of successive generations, there is little probability of its becoming fixed. But, given these conditions, its perpetuity is certain, unless the peculiarity is one which seriously diminishes vitality. In that case the variety would eventually die out.

Burdach† cites an instance of sex digitism which continued for four generations, but the normal steadily gained ground in the following ratio :

1st generation, as 1 to 35.

2d generation, as 1 to 14.

3d generation, as 1 to $3\frac{1}{4}$.

But let us suppose this family to have married into one which possessed the same anomaly, and let the infusion of new blood be only of people who had six fingers on each hand, while all reversions to the normal type were rigidly excluded; in the course of generations there would be a variety of people breeding as true to its kind as the Caucasian to his race. In the course of time the perceptions of new relations become fixed as memory, and the older memory fails to be recalled. If there be a law of diversity, it is that, a variation once fixed, other variations tend in that direction.

One does not have to endorse evolution *in toto* to believe that all the races of mankind are the descent of one common ancestry. There is the strongest of evidence for believing such to be the case. Yet, so far from reversions to the primitive type occurring, recent investigations show that "the permanence of types for 3,500 years is assured."

* *Gesammelte Populäre Vorträge*, ii, p. 72.

† *Physiologie*, ii, p. 251.

tral line. This is called indirect or collateral heredity. The analogy of alternating generations enables us better to understand such complicated cases of atavism. Chamisso, in 1811, discovered that salpæ are alternately free and aggregate. The young never resemble the parent, but always the grandparent. Three different intervening forms are found between two perfect types of the medusa, as follows :

1st generation, medusa.

2d generation, ciliated larva.

3d generation, polyp.

4th generation, strobila.

5th generation, medusa.

It is evident the strobila, polyp, and ciliated larva each possessed the characteristics of the medusa in a latent state ; one, two, and three generations are respectively required for these to become manifest.

In the same manner secondary characteristics of one sex dormant or latent in the other. "We can thus understand how, for instance, it is possible for a good milking cow to transmit her good milking qualities through her male offspring to future generations, for we may confidently believe that these qualities are present, though latent, in the males of each generation." (Darwin, Variation, etc., vol. ii.) It is evident that certain characteristics may be transmitted in a latent state for one, two, or even a number of generations, and suddenly reappear. An ancestor transmits certain peculiarities in a latent state. If these peculiarities become patent in a case of grandparent and grandchild, it is called atavism ; if they appear, for instance, in uncle and nephew, it is called indirect or collateral heredity.

Deafness runs in certain families, notwithstanding many members of these families may hear well. A hearing ancestor has the latent characteristics of deafness, and these are transmitted to his descendants. In only a few of his descendants may deafness appear ; yet all possess potential deafness. Theory would lead us to believe that the hearing members of such families are likely to have deaf children. The facts confirm this view. Deafness comes from fewer families than is generally supposed. Out of 3,054 pupils, from nine institutions, 766 had deaf relatives. These came from 437 families. Out of 2,195 pupils, seven institutions, 683 children had deaf relatives. These are from 360 families, with a total deaf rela-

tionship of 1,042. Out of 4,940 pupils, ten institutions,* 1,208 had deaf kinsmen. I believe 25 per cent. of the deaf have deaf relatives.

Consanguinity.—There has been a prevailing notion among many civilized nations, from ancient times down to the present, that consanguineous marriages often result in defective offspring. Such marriages are held responsible for a large percentage of the idiotic, the blind, the insane, the deformed, and the deaf. Alarming statistics have been compiled which would prove conclusively that consanguineous marriage is a terrible evil, were it not that the strongest of these have been utterly demolished by thorough investigation. Too often men become so enthusiastic on a subject that they attach less importance to the truth than they do to carrying their point. While I believe that consanguineous marriage is in itself a cause of deaf-muteness and of other defects, I yet think the evil results of such unions are, by many, greatly overestimated. I discuss the subject here because I think it properly belongs to the domain of heredity.

Perhaps no one, who has not tried, knows how hard it is to obtain statistics on this subject. I have the following from nine institutions in the United States and two in Canada:

INSTITUTION.	Source of information.	Date.	Number of pupils.	Number of children from consanguineous parentage.	Number of families represented.
American Asylum.	Facts and Opinions	1888	289	30	26
Texas Asylum.....	Roll and applications on file	1892	536	40	31
Minnesota School.	Report	1888	416	32	24
New Jersey School	Report	1885	129	5	.....
Colorado Institute	Report	1890	139	5	.....
Kansas Institution	Report	1890	600	20	22
Penna. Institution	Report	1886	79	6	.....
Illinois Institution	Report	1887	1,886	113	88
Ga. Institution....	Facts and Opinions.....	1888	258	69	20
Ontario Institution	Report	1891	908	110	?
Halifax Institution	Facts and Opinions.	1888	189	45	.....
Totals.....	.....	.....	5,459	481	.....

* Hartford, Report, 1887; Texas, Institution Roll; Minn., Report, 1884; Ky., Report, 1883; Kan., Report, 1890; Ontario, Report, 1887; New Jersey, Report, 1885; Ill., Facts and Opinions; Ga., Facts and Opinions; Mich., Report, 1887.

I find from these figures that 8.8 per cent. are children related parents. In 119 cases from Texas, 25 from Ontario and 12 from Colorado, it is not known whether they have deaf relatives or not, so I shall deduct 156 from the total pupils. This leaves 9 per cent. of consanguineous origin. Before taking any of the following percentages, I deduct the 156 known cases. Even with this reduction I think the number of children of unrelated parents is too large. It is reasonable to suppose that some of the cases from the other institutions are unknown. In addition to this, the reluctance with which some parents admit that they are related forces me to believe that a few others do not tell the truth on this subject.

The above figures do not show how the parents are related in the cases mentioned. To find this we are obliged to drop the Manitoba Institution from the list. This leaves ten institutions, with the following figures:

INSTITUTION.	Number of pupils.	Number of children whose parents are related as follows:					
		First cousins.	Second cousins.	Third cousins.	Fourth cousins.	Related by degrees not given.	
American Asylum.....	289	19	4	4	.....	.....	3
Texas Asylum.....	536	21	8	1	2	.....	8
Minnesota School.....	446	23	4	5	.....	.....	.....
New Jersey School.....	129	2	2	1	.....	.....	.....
Colorado Institute.....	139	3	.....	.....	.....	.....	2
Kansas Institution.....	600	13	4	7	1	.....	1
Pennsylvania Institution....	79	2	3	1	.....	.....	.....
Illinois Institution.....	1,886	76	17	9	9	.....	2
Georgia Institution.....	258	33	18	7	5	.....	6
Ontario Institution.....	908	55	19	16	... ..	.....	20
Totals.....	5,270	247	79	51	17	.....	42

These figures show that 4.8 per cent. are the offspring of first cousins. But some of these have deaf relatives other than brother or sister, and deafness, or at least a tendency to deafness, may be a family characteristic. From four or five of these institutions I find that about four twenty-sevenths have deaf relatives. Assuming this proportion for the whole and deducting 17, the above 4.8 per cent. is reduced to 4.1 per cent.

Now, I am convinced that the proportion of marriages of first cousins to all marriages is not so great as 4.1 to 100. " Dr. H. P. Peet, 'judging from the number of cases within his

own experience,' puts it, with reference to the marriage of first and second cousins, beyond which degree it did not seem to him important to pursue the inquiry, at scarcely 2 per cent. for the Middle States of America." (*Annals*, xxi, 208.) If Dr. Peet's estimate is correct, the marriages of first cousins alone would certainly fall considerably below 2 per cent., and I believe it does.

"It is not denied by the writers who defend the intermarriage of kindred that family diseases and defects, if any such exist, are likely to be perpetuated and intensified by inheritance from consanguineous parents, just as they would be by inheritance from parents of the most remote and divergent races, provided a predisposition to the same disease existed in each." (*Annals*, xxi, 211.) In a case of this kind a selection is made in regard to a certain disease or defect. It would be strange, indeed, if the mere kinship of the parents could prevent the same defect appearing in the offspring.

With animals, to secure vigorous and fertile offspring, there must be a strong similarity, and yet a diversity of the characteristics of the parents. The similarity must be to the extent of belonging to the same species or race, while the diversity is shown to be highly beneficial in the crossing of breeds or varieties. It is the same with man. As Dr. A. G. Bell says, "English, Irish, Scotch, German, Scandinavian, and Russian blood seems to mingle beneficially with the Anglo-Saxon American, apparently producing increased vigor in the offspring." (*Marriage*, second edition, p. 17.)

In order that the reproductive particles of the male and the female may properly co-ordinate, they must be of a very similar nature. Yet these may become too nearly identical—as in the case of near kin—and the polarity of these particles thereby become disturbed. The result in this case will be something abnormal—imbecility, blindness, malformation, deaf-muteness, or some other variation. I use the word *polarity* because I lack a better term. There are cases of indirect heredity in which cousins resemble each other more than they do their own brothers and sisters. Evil results might flow from their marriage. Again, say the mothers of two cousins are sisters, and each of the children have the characteristics of the father; it is probable their marriage would result in healthy children.

My theory makes consanguineous marriage in itself a cause of deafness, yet accounts for the apparent exceptions. This theory, however, may be subject to adverse criticism.

A Deaf Variety of the Human Race.—Deafness is hereditary. Were the conditions given, a deaf variety of the human race could be formed after a number of successive generations. But do any of the conditions exist?

Statistics seem to show that the marriages of the deaf, as a rule, are not so fruitful of offspring as those of their more fortunate neighbors. A large proportion will never marry. The affliction which deprived many of hearing also seriously impaired their health—and of a few I may say their intelligence. If these do marry we need not expect many generations of descendants. A number of the deaf seek to lessen the probability of perpetuating their “inconvenience” by marrying hearing people. However, the odds are against such a union being desirable. There would often be a difficult and unsatisfactory method of communication between man and wife. Besides, the bond of sympathy between deaf and deaf, together with their easy means of communication, makes it almost natural that they should seek helpmeets having the same affection.

For the sake of convenience I would classify the deaf as follows:

Class 1. Family congenital. Born deaf. Deaf relatives.

Class 2. Family non-congenital. Not born deaf. Deaf relatives.

Class 3. Sporadic. Born deaf. No deaf relatives.

Class 4. Adventitious. Not born deaf. No deaf relatives.

I have statistics of 1,129 pupils from three institutions in different parts of the country, and find they are distributed among these four classes in the following manner: Family congenital, 191; family non-congenital, 86; sporadic, 185; adventitious, 667. I think these figures give a fair average for the deaf of the United States.

We will suppose this number of deaf-mutes to marry, and allowing twenty per cent. to marry hearing people, how would they pair off? I submitted the question to Dr. D. S. Bodenhamer, Professor of Mathematics, Trinity University, Teahuacana, Texas, who gave me the following reply:

Twenty per cent. marrying hearing people.....	225
Sporadic marrying sporadic.....	24
Family congenital marrying family congenital.....	26
Family non-congenital marrying family non-congenital.....	6

* Minn., Report, 1884; Ky., Report, 1883; Kan., Report, 1890.

Adventitious marrying adventitious.....	316
Sporadic marrying family congenital.....	50
Sporadic marrying family non-congenital.....	22
Sporadic marrying adventitious.....	174
Family congenital marrying family non-congenital.....	24
Family congenital marrying adventitious.....	180
Family non-congenital marrying adventitious.....	82
Total.....	1,129

The above is the result of considering the forming of pairs as simple events, the figures being given in round and even numbers.

Let us look at these figures. In 225 cases the probability of perpetuating the affliction is lessened by marrying hearing people. In 390 there is a family taint of deafness on the side of one or both parties. A congenital characteristic is not necessarily inherited, yet it may be transmitted and become hereditary in the child and grandchild. There is a probability of the 24 marriages between sporadic and sporadic, and the 174 between sporadic and adventitious, resulting in a number of deaf children. Whether or not an acquired peculiarity can be transmitted is a mooted question; yet, as Dr. Warring Wilkinson says, "Any defect in parents is more likely to appear in offspring than if such defect did not exist in the parents." The 316 marriages between adventitious and adventitious would be more likely to result in deaf offspring than would the same number of marriages among hearing people.

Dr. A. G. Bell is no alarmist. He merely sees that conditions exist under which the deaf population must necessarily increase at a greater rate than the general population. There will never be the rigid selection necessary for the formation of a deaf variety of the human race, but the result will be virtually the same—an enormous increase in the number of deaf-mutes. How can men and women, devoting their lives to the amelioration of the condition of the deaf, consistently encourage marriages which, in all probability, will bring more unfortunates into the world?

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ENCOURAGE THE PUPILS.

THE contents of the following article represent a personal experience. I do not remember to have seen this subject discussed at any length in my experience as a teacher. Its importance can hardly be questioned. I have made no pretensions to a complete discussion, aiming rather to open the way for teachers of a wider experience, and incidentally to remind the profession of a few important obligations resting on it. Have teachers stopped to think how many young hearts are discouraged on account of a lack of appreciation of their efforts? Surely all of us have arrived at periods in our experience as teachers when this question has stared us in the face. We have no time for such reflections in the school-room, during the daily exercises, but when the duties of the day are over and the teacher finds time in his own home to study the characters and dispositions of his pupils, he begins to see his shortcomings, where he has failed, and where he can improve on certain methods employed. Above all, he desires to find some means by which the disheartened pupil may be encouraged. When thinking of this latter class of pupils, the true teacher usually gives himself a severe upbraiding for some occasions where he has not fulfilled that high obligation.

It is an easy matter for the teacher, however interested in the work, to pass carelessly by the efforts of the child. We forget that we are the censors of our pupils, and that it is our duty to see that the office is neither abused nor neglected. The pupil naturally trusts to our impartiality in the former case, and to our interest in their welfare in the latter. I have sometimes been made to feel that I was not doing my whole duty when reflecting upon some cases of this kind that have fallen under my charge, and I have often felt a degree of condemnation for the indifference that I have almost instinctively shown in cases where the pupil has depended on my sense of justice in rewarding his efforts.

We go into the school-room confronted by a score of faces, eager, anxious, longing. Many of us have entered school so often before in our experience that the feeling of responsibility we formerly possessed has lagged. The work has become a sort of routine, and routine in a school for the deaf is dry indeed. There, if anywhere, is tact needed—tact to see the moment an exercise has ceased to be interesting, and to effect a change that will be both welcome and beneficial. Happily for

the profession of teaching the deaf, the necessity for movements of the limbs in the act of signing serves to keep alive our energy to a greater degree than in the common school.

Feelings of weariness or trouble, or very often a slight indisposition, will have a tendency to drive the teacher into a careless mood. While in such a state, the child comes with his slate full of work, the fruits of an hour's labor. The teacher too often gives it a cursory glance, mayhap finds it absolutely necessary to mark a couple of mistakes, which he does in a perfunctory way, and returns it to the child without a word of comment, either of criticism, praise, or suggestion. The child is disappointed. How could he be otherwise? If an hour of perhaps careful work provokes no smile of approval, what advantage in trying it again? If the teacher does not explain to him the reasons for certain corrections, what will he do but repeat the same mistakes? The importance of this should be emphasized. Here is the secret of the mistakes of the pupils that the teacher often looks upon as the result of indifference or stubbornness. The teacher thinks it is the child's fault, whereas the principles involved have never been explained to him. The fault lies with the teacher and not with the pupil in a great many cases. Every teacher should be able to lay down rules for action, and to assign reasons for certain things where such are necessary. If the teacher has not yet mastered these things, it would seem the advisable thing for him to learn them himself ere he essays to tell the less comprehensive mind of the child how the thing is done, and we need not be surprised nor disappointed if these principles are not everlastingly impressed on the minds of the pupils with one explanation, even though a vigorous and thorough one. It may be necessary to repeat it a few times to the class in its entirety, and possibly to give a few private explanations to the less apt ones. It may make the cold perspiration stand out on our brows to contemplate the amount of patience required to carry out all this, but, unless we are prepared to display a great amount of patience, we have missed our calling. Let us not be impatient with the children.

The chances are they remember about as well as we ourselves did when we were pupils. Let us remember that the mind of the ordinary child rarely looks at life, especially school life, in that serious way that affected us only after we began to realize that upon the proper improvement of our time at school depended the measure of our success in life.

This subject is not only valuable to the whole class, but to the so-called slow ones in a special degree. Many a "slow" pupil has been discouraged almost to capitulation by this lack of proper encouragement on the part of the teacher. When a boy of this kind is sent to his seat, with slate covered with unsympathetic marks of correction, it is not surprising that he drops into his seat dejectedly. And it is less surprising that he is soon buried under an avalanche of skepticisms concerning the value of school. The teacher who pursues this course does not reflect credit on himself. He is giving notice to his poor pupils that to be a grown-up person, and a success in life, they must be sad, surly, and awfully severe. Now this is a moral wrong. Life is serious enough, from its very nature, without any effort on the part of the teacher to add to it. What we need in life is sunshine, not alone from the great source of light, but reflected from the face of every teacher.

It is a serious thing for the teacher to show indifference concerning the results of the child's labor. Granted that a child is stupid, or inapt at learning, is it any fault of his? Is the unfortunate one, whom nature has endowed with mental capabilities somewhat inferior to those of his more fortunate neighbor, to be passed carelessly by because, forsooth, his grasping propensities are not as great as those of some other pupils? There are many children in our schools whose lives are full of sadness from this very cause. We should reason with them, show the wandering mind *why* this expression is wrong, and that other right. We should give the child to understand that his best efforts are appreciated by his teacher, whose encouragement counts more with him than all other sources combined. If the child has done his work even moderately well, we should not fail to praise him occasionally. Let us not be so economical with our approving word and reassuring smile.

I shall never forget a boy whom it was my good fortune to have under my instruction. I say "good fortune" because the results of that experience were highly beneficial to me in my after experience. How the little fellow used to watch my pencil as it went hastily through his work, turning a slight shade more crimson with each additional stroke. At first discouragement was depicted on the boy's face. Then the innate goodness of the little fellow, and his undoubted anxiety to learn, stirred me to pity, and the amount of patience I showed him that year was surprising even to myself. I don't remem-

ber that he ever failed to get a smile from me. And he, in turn, never failed to go at his next task with renewed energy. It was my satisfaction, before the close of that year, to see this same boy pushing along toward the head of the class. After the corrections had been made on his slate he did not go to his seat and fall into a trance. He seemed reassured with the belief that his teacher was in sympathy with him.

“O,” say some, “this matter of complimenting the pupils is one that should not be handled indiscriminately. Some children, like some grown people, are already so conceited that it is inadvisable to say anything commendatory of their work.” There are none so conceited but they can be benefited by an occasional well-directed word of praise. It is human nature to enjoy praise. Not only that, it *d demands* it. Let us study ourselves as teachers for a moment. What do we think if the superintendent or principal under whose direction we are laboring withholds altogether his opinions of our work? In truth, do we not expect a word of encouragement from him now and then, and are not our feelings hurt if we do not get it? A teacher has excellent reason to feel a suspicion that his work is not entirely satisfactory if he teach from September till June without a word commendatory of his work from his principal. If, then, we enjoy a little encouragement from *our* superior officers, is it not reasonable to suppose that the child enjoys it in an equal degree from *his* superior? Let us not forget that the man is simply the boy grown up. And we may remember with equal profit that the boy or girl, however tricky, however stupid he may be, still has a heart that is as susceptible to cheerful words as our own. In correcting his work, let us not feel that we are seeking our revenge for his carelessness, but let it be our aim to lead him out into the open light. Let us make it a principle, governing our actions in the school-room, to lend a word of encouragement as often as our good judgment directs, and not have it said of us that this stupid child or that bright one has lost valuable time in his school-life because the interest of the teacher was not properly enlisted in his behalf. A word of encouragement often lifts weak-kneed Christians from the slough of despond. In like manner the disheartened pupil may be lifted up to a higher plane of knowledge than he has yet seen.

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A FEW COMMON DIFFICULTIES IN OUR WORK.

Of the many branches of education there is none so replete with obstacles and difficulties as that branch which applies itself to the deaf. From the commencement of a deaf child's school career we have placed before us one long, weary, uphill task, and it is only by a clear conception of the difficulties we shall have to encounter that we are enabled to prepare the means to gain success.

The teacher of the deaf, more than any other worker in the cause of humanity, must, from the beginning, habituate his mind to discover exactly what is his difficulty in performing his work in all its stages. The discovery of a difficulty is as honorable an achievement as rendering assistance to surmount one. When a physician has discovered the exact nature of a malady more than half of his task of restoring health to the sufferer has been accomplished. The great discovery that Columbus made was not that of the existence of America but that of the conception of the difficulties that existed before he achieved his fame as the discoverer of a new world. If we apply this thought to every branch of human progress and industry, we shall find that years have been spent in the same every-day kind of routine simply because of the ignorance of some lurking difficulty. Men have labored their lifetime in one monotonous strain because they have failed to recognize that there were any difficulties in their daily vocation, and although such difficulties may have been presented to them in more or less vivid forms, yet it has never dawned on them that such difficulties were in reality finger-posts of progress.

The difficulty our schools have in securing efficient teachers is one which cannot be overlooked. It is only by a sympathetic co-operation that the best educational results can be obtained. This co-operation is only possible where we find teachers thoroughly qualified for their work. Just as in the social and moral world goodness of purpose must be the predominant quality in a man to surmount social and moral difficulties, so also, in the teacher of the deaf, goodness and soundness of judgment and comprehension of the difficulties he has to contend against should be the predominating quality before he can be thorough master of his subject. Only the man who so understands the work he has taken upon himself to perform

succeeds in getting down to the minds of the children. Emolument and encouragement must be the price paid for such a teacher. The greater facilities now afforded for the perusal of the publications of the views of our predecessors, and the establishment of colleges for training and examining teachers in this special work, provide a means for raising the intellectual status of the teacher, and more thoroughly qualifying him for the task he has to fulfil.

A proper classification of pupils is no small difficulty and requires careful, deliberate judgment. The two chief conditions of classification should be that the pupils are fairly equal in ability, with a sufficient number in each class to secure real emulation and mental stimulus. There exists a diversity of ability; some have a natural aptitude for one class of subjects which they have not for others, therefore age and length of time at school cannot be taken as the correct grounds for classification.

The difficulty of deciding what system is best suited for a child is one which can only be determined after a fair trial.

We now come to the difficulties the teacher finds in the teaching of the class subjects: articulation, lip-reading, arithmetic, language, etc. To enable our pupils to gain facility of utterance great observation must be exercised by the teacher, so that a badly pronounced word may never be passed. However well the elements of speech may be taught, the child will require frequent correction, and it behooves a teacher to seize every opportunity of giving it. Results in the speech of his pupils will eventually be the reward of his labors. A common error of many teachers is that of watching a child's lips when it is speaking instead of listening without observing the position of the lips. He becomes so accustomed to the different motions of a pupil's lips that he is able to understand the child, however indistinct his speech may be. Lip-reading also is fraught with obstacles which are ever tending to discourage the pupil in his endeavors to gain a free means of communication. To the deaf ear there is no distinction in the pronunciation or the position of the organs of speech in many of our sounds, as *t* and *d*, *p* and *b*, *f* and *v*, *k* and *g*, *s* and *z*, etc. The only means of success is by giving continuous exercises on those sounds and their combinations prior to advancing to words and sentences.

Arithmetic is equally abundant in obstacles. A child's first



notions of number are concrete, therefore the earliest exercises in counting should take the form of counting actual objects. The objects in a room—the panes of glass in a window, number of scholars in a class, a handful of marbles—all provide scope in which to convey to the child's mind the elementary principles of arithmetic. A common mistake made by many teachers is to continue using these artifices too long, to persist in showing objects after the child has fully grasped the meaning of numbers in the abstract. Concrete illustrations should be discarded as soon as they have served their purpose.

It is in the acquisition of language, written and spoken, that we find the *pons asinorum* of the deaf. The idiomatic nature of our language and the different shades of meaning applied to many of our words are a constant means of thwarting our pupils in their acquisitions. In the early stages our lessons should be simple and practical, using as illustrations the circumstances of the child and of those with whom it comes in daily contact. The primary aim is to create an interest in the lesson, and success is sure to attend it. It is patent to the knowledge of every teacher how limited are the colloquial expressions of our pupils in and out of school. This condition can to a considerable extent be ameliorated by the teaching of colloquial phrases while in the play-ground and during the intervals of school, for it is at those periods that the opportunity for lucid illustrations occurs. The difficulty lies in inducing the pupil to adopt a verbal means of expression, but this can be surmounted by the example of the teacher in adopting verbal language in communication with the pupil and requiring him to do the same. We, as teachers, are responsible for the educational welfare of those entrusted to our care, and one of our most important duties is the formation of habit. The principle embodied in one of our national proverbs, "As the twig is bent, the tree is inclined," is one frequently brought under our observation, and we all recognize the impossibility for a child to rise higher than the standard set before it. It is only by the constant persistency of the teacher in putting before the child an example which induces it to make known its wants, complaints, etc., in verbal language that we can enable it to gain greater facility in the use of colloquial language instead of the fragmentary and disconnected expressions which we are so accustomed to hear. Circumstances are continually occurring during school intervals

which provide a ready means for the exposition of new words and phrases, and it only requires unity of action among the teachers that our pupils may become thoroughly habituated to the use of colloquial phrases and expressions similar to those we hear among hearing children. It may often be very inconvenient to seize those opportunities, for amid the busy routine of institution life there is little time to spend in making the innumerable corrections that are necessary, but the principle aim we have in view is that of giving our pupils a correct use of language, and no systematic arrangement of work should be allowed to prevent favorable opportunities being taken. Where articulation and lip-reading fail we can resort to other means by providing each child with memorandum and pencil with which to note down any new word or phrase. This notebook could be examined periodically by the teacher, who would then see what new acquisitions his pupils had made.

This out-of-school attention should not be merely individual. The natural tendency for a teacher to bestow most attention upon his own class pupils is one which must be avoided; hence the necessity for hearty co-operation among the teachers in their endeavors to emancipate the deaf from mental darkness and give them the full benefits of intellectual light.

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LANGUAGE-TEACHING.

ALL the congenital and "natural" mutes of my acquaintance who use language freely and accurately were either taught by persons who had no knowledge whatever of any of the ingenious methods by which professional teachers of the deaf try to initiate their unfortunate charges into the intricacies of English grammar and rhetoric, or they were so situated during their school-life and afterwards that they had constant opportunities for practice in language by conversing with speaking people who did not follow any pre-arranged plan in these conversations. Take, for example, the case of Mrs. B., who became totally deaf at the age of four years. I met her first when she was twelve years old. She was a bright girl, full of life and fun, and used language as well as any hearing child of the same age. I was then shown letters written by

her and giving descriptions of her travels. They were admirably worded and free from mistakes of any kind. No one reading them, without knowing their writer, would have suspected that they were composed by a deaf child. An inquiry as to the manner in which she had been taught language elicited the information that "her mother talked with her constantly, and she was compelled to depend upon speech for everything." "I thought of nothing," writes her former teacher, "but how to render my pupil like other children in the use and comprehension of language." Neither the mother nor the teacher had at that time any knowledge of the art of deaf-mute education.

A well-known gentleman who has been deaf from birth, and whose language does not in any way differ from that of an educated hearing man, wrote to me in answer to a letter in which I asked him how he was taught: "My father simply spoke to me as to his other children. As he was at home a great part of the time, I was with him, and when he was absent my mother, brothers, and sisters helped to instruct me." Once I met a congenitally deaf young lady of sixteen whose language was entirely free from deaf-mutisms. She had been taught by her mother, who knew nothing of our "systems," and who told me that she taught that deaf daughter to speak by talking to her in the same way as to her other children. A short time ago a little boy of ten years of age who has been deaf from birth, and who is rather dull, was brought to me for examination. He has been taught at home by his mother, who knows nothing of the scientific methods of teaching language to the deaf. The child has a limited range of ideas and talks on simple subjects only, but what he says is expressed in good English. He astonished me by using long sentences that invariably were well constructed.—I had a young lady in my school once who was totally deaf and was reported to have become so at the age of five months. When she was fifteen years old and had been under instruction eight years, the principal of another school paid us a visit. After talking to this young lady for a whole hour, he turned to me and said: "She has not used one single deaf-mutism yet." She was a day pupil and her parents and sisters took a great deal of pains to talk with her constantly at home.—There is a little fellow in my school now who is eight years old and has been totally deaf over five years. He came to us two years ago

and has been a day scholar. His parents take great pains with him at home. He talks a great deal, but never uses a sign. Although the language which he uses is not always correct, yet it is so quite often.—A deaf young man whose intellect is decidedly weak and who had made very little progress during the eight years that he had been in my school has been at his home now for the last five years, and has received a good deal of attention from his parents and his brothers and sisters. His improvement in language is surprising. His thoughts are still as infantile as ever, but he almost invariably expresses them in connected and well-arranged words.

I know a good many more deaf persons, bright ones and dull ones, who in the natural, practical way have learned to use language well. Such results were unknown so long as the grammatical system held supreme sway in our schools. In an article bearing on this subject (*Annals*, vol. xiv, p. 194) Dr. E. A. Fay makes the following remark: "In all the writer's acquaintance with deaf-mutes * * * he does not know one congenitally deaf person who uses language with the freedom and accuracy of an educated hearing and speaking man." This statement was made more than twenty years ago, and I am sure Dr. Fay would not apply it to his acquaintance with deaf-mutes of the present day.* There is no doubt that the change in the condition of affairs is due entirely to the fact that of late years the conversational or natural method of teaching language which he so ably advocated in the article referred to has found favor, more or less, among instructors of the deaf. In the school under my charge this system has been practised for a dozen years. To give an account of its workings and its results is the object of this treatise.

The plan which I pursue is in substance as follows: During the articulation drill, in the beginning of the course, the pupil becomes familiar with a number of single words and a few simple phrases. Ease of pronunciation and the immediate wants

* I wish I could give my unqualified assent to what Mr. Greenberger says, or even let it pass without comment. It is true that since that article was written I have seen letters and compositions of congenitally deaf persons which were expressed in good idiomatic English, and that I know now a larger number of congenitally deaf persons whose use of English approximates excellence than I knew then; but I cannot say that I am personally acquainted with any who have fully attained to the high standard indicated.—E. A. F.

and requirements of the child determine the class of words that are taken up and the order in which they are taught. The teacher does not prepare a list of words which the pupil *must* learn, but she is constantly on the alert to seize every opportunity that presents itself for introducing little words. For instance, one little fellow makes the gesture for "home," which most new-comers are apt to do during their first days in school; the teacher tries to make him say the word "home." Another child indicates by gesture that he wants a drink of water; he is made to attempt to say "water." A third child, showing an apple, or a ball, has to pronounce the names of these objects; a fourth one points to some picture on the school-room walls that attracts his attention, and some other word is introduced. Such opportunities for teaching words to express ideas which the pupils desire to convey are almost continually presenting themselves, even at the lowest stage of the instruction. If there is any lull, and the children have nothing to say, the teacher points to some object or picture and lets them try to pronounce its name.

It has been strongly urged by advocates of the conversational method that the instruction in language should begin with whole sentences and not with single words. "The process of nature requires us to begin by teaching sentences instead of words," says Dr. Fay, in his article which I have already mentioned. I do not know whether such a plan can be successfully carried out if the manual method is pursued, as I have never had any experience in teaching by that method; but I do know that if pupils are taught by articulation it is not feasible to begin with sentences. It is all the little deaf beginner can do if he imitates one word, but he cannot grapple with two or more words at once. If he learns to say "home" in the manner which I have described, this word stands for the sentence, "I want to go home," but he is not yet able to pronounce and remember all the five words which compose the sentence; hence we are satisfied, for the present, to accept the single word. As soon as he has obtained sufficient control over his vocal organs, and has learned to repeat words more readily, and can remember their meaning, such occurrences of the school-room as have previously been used for teaching the single words "home," "water," "apple," "ball," etc., are made the occasion for teaching the sentences: "I want to go home," "May I have some water?" "I have an

apple," "I bought a ball." In doing this we are not at all acting contrary to the course of nature; for all hearing children, learning to speak, begin by making a single word answer the purpose of a whole sentence. "Pussy," means "The pussy has come into the room;" "hot" stands for "The food is too hot," etc.

The following is a list of some of the words and sentences which, during the last school term, were learned in this way by pupils who were spending their first year with us:

Papa, home, ball, bone, toe, eye, arm, fall, tall, top, bell, baby, thumb, shoe, marble, lamb, boat, hat, water, doll, mamma, muff, boy, hoop, man, table, flour, lamp, knife, tooth, mouth, fork, belt, horse, whip, bird, cap, comb, brush, pail, barrel, chair, cat, shovel, hoe, plow, cars, thimble, shawl, fish, saw, apple, ladder, pole, pan, cow, mat, pipe, hen, gun, hammer, key, girl, book, bowl, fan, one, two, four, bee, house, three, window, mouse, door, towel, hair-pin, soap, pen, bottle, pencil, floor, deer, slate, paper, woman, sew, boot, broom, window-pole, coat, my, you. I will go home in the cars. A boy gave me a nut. It is cold. I am cold. I have new shoes. I ate some nuts. I had some coffee. We have a new boy. A man gave me a penny. To-morrow I will go home. The cat jumped on the table. Mamma bought some rolls. I like ham. The cat caught a mouse. I am warm. May I wash my slate? Nell has a doll. I will have a bath. I ate some turkey. A boy gave me some candy. The sun is warm. A man gave the horse some water. The barber cut my hair. My papa has a cow and a calf. A boy gave me a piece of cake. I played with the cat. My mamma made some rolls. A man fell from a horse. I walked in the park. I will be a man. I played tag with some boys. I will have a new hat. Mr. N. gave the boys new caps. I like potatoes. I love the baby at home. I can dance. My mamma made some cake. I have a cough. I saw a man shoe the horse. The man will fall. I gave an apple to a girl. A man caught some fish. May I have some water? I am sick. Shut the door. My papa gave me a doll. You have a new winter hat. I lost my knife. The girl has a doll's head. Two men are rowing a boat. I gave Miss N. some flowers. How do you do? I am well. I washed my face. I sleep in the bed. I made a paper boat. The baby is fat. I will have a bath in the bath-tub. I laughed at the boy. I fell on the ice. I rode in a cab. I made a paper doll. I bought some candy.

From the promiscuous character of these words and sentences and the manner in which they are presented to the pupil, it is evident that the teacher cannot prepare her lessons at this stage of the instruction any more than the mother or nurse of a hearing child learning to speak prepares regular language lessons for it. In either case the learner determines what the lesson is to be about, and he chooses what he wants to express either from necessity or from interest. Words and forms of

speech which he is taught in this manner are sure to be appropriate and within his comprehension. Those from whom the hearing child learns to speak do not, as a rule, give regular lessons, but are for the greater part helping and correcting only. We carry out the same principle in teaching language to our pupils. We do not force upon them any particular parts of speech or particular forms of sentences after a pre-arranged plan. Our sole aim is to find out what the child has in his mind, and then we help him to express it; or if, in trying to express his ideas, he makes use of words which he has previously learned but does not use them right, we correct him. Most of the advocates of the natural method of teaching language cling to the idea that the teacher must have a pre-arranged plan in his mind as to the order in which words and forms of construction are to be introduced. But I differ from them all. In my opinion nothing is more calculated to pervert the purposes of the natural method than such pre-arranged plans. To prove the correctness of my views I refer to those deaf persons whom I mentioned in the beginning of this article and who show better results in language than have ever been attained in any of our schools, and yet those persons were taught by their mothers and others who knew absolutely nothing about pre-arranging plans. If a man takes a course in French after the natural or conversational method because he contemplates a trip to France, it is well for his teacher to arrange his lessons so as to bring in forms of expression which his pupil will most likely have occasion to use. But in the case of deaf children I say: The way to teach them to talk is to talk with them.

Another notion which is quite generally entertained by teachers is that we must provide frequent reviews and repetitions of the words and sentences which are given to the pupil. My experience has taught me that there is no need of such reviews. There is a certain sameness in the circumstances and surroundings of a child, therefore the same little words and sentences naturally repeat themselves often enough if he is constantly required to talk; and, if the development of his language is allowed to take its own natural course, the words which he has learned will be applied again and again in ever varying forms of construction. At the risk of becoming monotonous I ask: Did those mothers who taught their deaf children so successfully at home prepare reviews? We all know that

vivid impressions are more readily retained by the memory than frequent repetitions. The interest which the child feels in what he wants to say is what helps him most to remember the form in which he is taught to express it. Repetition lessens this interest and does very little good. The school-time is more usefully employed if we get the pupil interested in something new and make *him* talk about it than if he is compelled to repeat old stories. —It is the rule in our school that whenever one of the pupils speaks all the rest of the class must pay attention to what he says, so as to be able to repeat it and to write it down during the next special hour for writing. Now all the teachers of our lower classes find that when the writing hour arrives each pupil will reproduce his own sentences with fewer mistakes than he can write those of others. Due allowance must, of course, be made for the special attention that the teacher gives to the child who makes a statement and for the practice which that child has while he speaks. But, after making all such allowance, the fact still remains that generally the child is more interested in what he says himself and in the subject about which he speaks than in that which others say. It is this increased interest which helps him more than anything else to remember the language that he is made to use. We have also found that the dullest and most backward pupils, who cannot remember any sentences that were spoken or written by their classmates, often retain their own sentences which they constructed with the aid of the teacher. And this can only be accounted for by the fact that usually the child feels a greater interest in the subject about which he speaks than in that which is discussed by others.

I now invite the attention of the reader to the following two lists of sentences, which are given without correction. The pupils who wrote them had been asked by their teacher to write anything that they remembered from their recent exercises in conversation. List No. 1 is the production of a little girl of ordinary intelligence, who is nine years old, became deaf at two years of age, and has been in school since March 17, 1891, previous to which date she did not have any instruction. List No. 2 was prepared by a girl who is quite dull, thirteen years of age, deaf since she was two years old, and under instruction since January 10, 1890:

I I saw a red table cloth on the table. There is a door bell on my mamma's house. My mamma has a large sofa at home. Is the sofa

pretty? Yes, ma'am. I will eat *bred* and butter of supper. I saw a soldier on the boat. I saw a man have a shovel. My mamma bought *her* a white muff. I will eat some strawberries and sugar. I saw a man plow the ground. I saw a large church. Juliet will go home with her papa in the cars. Mamma has two sponges in the bath room. I caught some fish with a fish pole. The lamp is on the hook. I will go home in the cars. I saw a boat on the water. The mouse will go in the *prat*. I wash my face and hands with soap. I have some candy in my pocket. I saw a man in the water.

II. I have many buttons on my ——. Can you sew on buttons? Yes, ma'am. I saw a red table cloth on the table. My mamma has a large sofa at home. Is the sofa pretty? Yes, ma'am. I saw a — — on the wall. Can the — run? Yes, ma'am. I saw a man on a ladder. My mamma has a sewing machine at home. My mamma put some sugar in the *lamonde*. My mamma bought some nuts in the store. My mamma bought a can of corn. I saw the servant poke the fire in the stove. I saw a tiger *on* the park. Can the tiger bite? Yes, ma'am. My mamma has two sponges in the bath *room*. I saw a man plow the ground. Juliet will go home with her papa in the cars. I caught some fish with a fish pole. I will go home in the cars. I wash my face and hands with soap. I have a tooth brush up-stairs.

It will be noticed that in No. 2 there is a word omitted here and there and a place left blank for it. The words which are left out were new, and the pupil had learned to pronounce them but had not yet been taught how to write them. It is one of my principles, in teaching language, to let speech precede writing. The reasons for adopting this principle and the advantages resulting therefrom are fully set forth in my treatise on "The Word Method," which was published by the American Association to Promote the Teaching of Speech to the Deaf in its Circular of Information, No. 1. I therefore refrain from descanting on this subject here. Another point which may strike the reader of these two specimens of language exercises is the infrequency of the use of the interrogative form; list No. 1 containing only one question, and No. 2 containing four questions. In the grade to which the pupils who wrote these exercises belong the teacher asks one or more questions in connection with every topic that is broached. The pupils are not sufficiently advanced to formulate questions, and do not remember them so well as they do their own statements. It has been my experience that pupils invariably learn to understand questions and to answer them long before they are able to construct a sentence in the interrogative form.

In our lowest grade the topics for conversation are suggested by actual occurrences in the school-room, and by pictures. The

following is a specimen of a language exercise with a class of pupils whose conversation is just beginning to turn on happenings outside of the school-room, which they bring up voluntarily and which are not suggested by pictures before them. This change in the subject-matter of conversation takes place in due time without any special effort on the part of the teacher. But as soon as she notices the first indication of it she encourages the children to talk about outside matters and to tell what they have seen or done on the play-ground, at their homes, in the street, etc. :

I spilled some coffee on my apron this morning. Did you wash the apron? No, Emma. We saw Viola's friend in the street. What is her friend's name? I do not know. We will have fish for dinner. Do you like fish? Yes, Amelia. Eva hurt her hand. Did she go to the hospital? Yes, Bernard. Viola took medicine. Who gave it to her? The nurse. We saw a dead bird in the yard. Who killed it? I do not know. I went home last Friday. How did you go? On the cars. We played school in the play room. Who was the teacher? Viola. I saw a large dog in the street. Were you afraid of it? No, Hattie. A boy sweeps my father's store. Does he sweep it every day? Yes, Louise. We saw a blind man in the street. Did some people give him money? Yes, Alfred. A horse fell in the street. Did some men help it up? Yes, Tilly. I will go to the country. When will you go? In summer.

The following exercises were used in a little more advanced grades. It will be seen that there are more questions asked and the topics are discussed more exhaustively :

I. Theodore broke a branch off the tree. Is the tree by the fence? Yes, Rufy. What color do you think the --- will be? They will be pink. What kind of fruit grows on the tree? Peaches grow on it.

II. Last Tuesday afternoon Ellis saw a man driving very fast. Were there many people in the street? Yes, Charlie. Did he pull the lines hard? Yes, Willie. Did the horses gallop? Yes, Arthur. Were they frightened by the cars? No, Theodore; the driver whipped them hard. Was there a lady in the carriage? No, Ruth; there were two men. Did a policeman arrest the driver? Yes, Ethel.

III. Last Friday evening Miss R. petted a kitten. Where did she get it? One of the boys brought it from the cellar. Did the boys make a box for the kitten to sleep in? Yes, Katie. How many kittens are there in the cellar? There is only one now; there were five, but four of them have disappeared. Did Miss R. enjoy petting the kitten? Yes, Helen.

These conversational exercises or free discussions of any subjects that the pupils are interested in are continued throughout the greater part of the course. But, while at the lowest stage of the instruction almost the entire school-time is given up to them, the number of hours that are daily devoted to

them gradually decreases as regular studies, such as reading, arithmetic, geography, history, form study, physics, chemistry, physiology, etc., are introduced. All the lessons on these subjects are given in the form of questions and answers, and the pupils recite very little from books, so that in reality, even in the highest class, there is conversation going on all the time except during drawing-hours, the only difference being that the little children talk about common things and the older ones discuss topics of geography, chemistry, etc.

When an ordinarily bright child has been in school about two years we begin to aid the instruction in language by a course of reading-lessons. I use for this purpose the sets of reading-charts for common schools that have been published by D. Appleton & Co., A. S. Barnes & Co., of New York; Butler & Co., of Philadelphia, and others. I find these charts better adapted for teaching language to little deaf children than the common school readers, which generally contain stories covering a whole page, or sometimes two or three pages. To explain all the language of such a story in one lesson is impossible, and if several lessons have to be spent on one and the same story on different days the children become tired of it. They learn more if in each reading hour a fresh chart is placed before them with an interesting picture and a few sentences printed under it, such as, "Ned fell from his sled," etc. I let them read that sentence and then ask a good many questions about it: Do you think Ned was hurt? Will he get on his sled again? Who gave him the sled? Did he make it himself? Have you a sled? Who gave it to you? Where do you keep it in the summer?

To increase the vocabulary of pupils who have been in school two or three years, and to make them familiar with colloquial language, we give them a series of lessons on common things, of which the following are specimens:

I. How many pupils are there in this class? How many boys? How many girls? Are all the pupils of this class present? How many are absent? How long has — been absent? What is the cause of his absence? Is he sick? What is the matter with him? When do you think he will come back to school? What is the number of this class-room? Is it a large room? How many windows has it? Are the windows large or small? How many panes of glass has each window? Are all the windows the same size? Are all the panes of glass the same size? What color are the window-sashes? Are there any curtains to the windows? Are there any shutters? Are any of the panes of glass broken? Who

broke them? Who will put in the glass? How many doors has this room? How many panels has the door? Has the door a lock? How many hinges has it? What kind of a knob has it? What color are the walls of this room? Are they papered or painted? What color is the ceiling? How is the room lighted? Has this room a closet? How many shelves has the closet? What do we keep on the upper shelf? On the lower shelf? How many black-boards are there in this room? Is the black-board fastened to the wall? Does it stand on an easel? Can you move the black-board? With what do you write on it? Are there any pictures on the walls of this room? Do the pictures hang on hooks? Are they new? Are they framed? What kind of frames have they? How many desks are there in this room? How many pupils sit at one desk? Who sits at the same desk with you? What do you keep in your desk? Is your desk fastened to the floor? Can you move it? What kind of wood is it made of? Is it comfortable? How is this room heated? Are there any steam pipes in it? Are the steam pipes fastened to the wall? Are there any valves on the steam pipes? Do you know how to turn the valves? Which way do you turn them to let in the steam? Which way do you turn them to shut off the steam? Do they turn hard? Does the sun sometimes shine into this room? At what time of the day does it shine into the room? Do you like a sunny room? What kind of a floor has this room? Who sweeps the floor? When is it swept? When is it washed? Who dusts this room? Who cleans the windows? On what floor is this room? Are there any other class-rooms on this floor? How many class-rooms are there on this floor? What class is in the room next to this? What floor is below this? What floor is above this? How many stories high is this building?

II. What day is this? What day was yesterday? The day before yesterday? What day will to-morrow be? The day after to-morrow? What is the first day of the week? What is the last day? Can you tell me something that happened a week ago to-day? What day of the month is this? What day of the month will be a week from to-day? Two weeks from to-day? On how many days of the week do we have school? What month is this? What was the last month? What will be the next month? What is the first month of the year? The second? The third? The last month of the year? In what month is Christmas? What day of the month? In what month is Thanksgiving day? In what month is Decoration day? On what day of the month? In what month is Washington's birthday? In what month is your birthday? What time is it now? What time will it be in fifteen minutes from now? What time was it one hour ago? At what time does school begin in the morning? At what time does it close? How many hours are you in school in the morning? How many in the afternoon?

In a similar manner the dining-room, the bed-room, the play-room, and what happens in them; a ride in a street-car, a visit to the store or the theatre, etc., are made the subjects of language lessons in the lower classes. In the advanced classes, where the pupils use ordinary text-books and read the daily

papers, their language takes care of itself, so to say. At no stage of the course is any of the school-time given up to lessons on particular words or on grammar. If I am not mistaken, the school under my charge is the only one in which the recommendations which Dr. E. A. Fay made in this regard are carried out. He says:*

Every child learns to speak copiously, fluently, and idiomatically without having the slightest idea of the rules of grammar; a man who has committed a dozen grammars to memory may be able to do neither. The study of grammar is unnecessary, because the language may be fully learned without it; it is worse than useless, because the time given to it is needed for the acquisition of language; it is an actual injury, because it distracts the pupil's mind in composition by leading him to depend upon his recollection of rules to determine the inflection and order of words, instead of his consciousness of what is right, resulting from reiterated impressions.

To these remarks of Dr. Fay I wish to add what Dr. W. A. Hammond, the great neurologist, who probably knows as much about the human brain and its functions as any other living man, said more recently in the *Popular Science Monthly*, vol. xxxvii, p. 726:

As for grammar, it should be banished from all schools, except, perhaps, from the senior year of a university course. No child ever learned to speak good English from studying grammar. It has driven many a poor little wretch into headaches and other nervous troubles. It is the most ingenious device for forcing an immature brain into early decrepitude that the cunning of man has yet devised. The only reason why it does not do more harm is that not one-tenth of the pupils that come out of our schools know anything about it.

Since the teaching of grammar and all exercises on the grammatical plan were entirely omitted from our programme and the time which was formerly devoted to them has been spent in actual practice in talking, our pupils do not use half the number of deaf-mutisms that we had to struggle against in previous years. They learn to understand language much quicker, are more apt to use it spontaneously on all occasions, and reach that stage when spoken language can be used as a means of instruction in the ordinary branches of knowledge in less time than formerly, when we used the grammatical system. During the last school term two congenital mutes, one of whom had been in school six years and the other seven years, were promoted into our highest class. In former times, when we followed the grammatical plan of teaching language,

* *Op. cit.*, p. 201.

pupils of that condition had to work hard for ten years before they were prepared to enter our first grade. I remember that in past years I was often compelled to adapt my language to the deaf-mute style of talking and to make use of natural signs when I attempted to give a simple lesson in geography, for instance, to a class of pupils who had been in school five or six years. Now I can give a similar lesson to pupils of three or four years' standing without making a single sign, and am able to use language which, although very simple, yet does not vary much from that which we use with little children who can hear. We all know that as soon as a deaf child reaches that stage at which spoken language can be used as a means of instruction, the worst of the battle is over and the rest is only a question of time.

Some teachers of the deaf have told me that they had tried the conversational method, but had to abandon it on account of lack of suitable topics to interest the pupils. In our school we hardly ever experience difficulties of that kind. The children seldom fail to have something to say and almost always seem ready to talk. The day pupils bring in a good deal of news, and although the resident pupils are at a disadvantage in this regard, yet they take a walk every morning before school begins and always see plenty to interest them in the busy and lively streets of the city. I can readily understand that if a school is situated in or near a small town, its pupils lack these opportunities and therefore will not be apt to be full of interesting news when they enter the class-room. But the human brain is never idle any more than the lungs or the heart stand still while life lasts. Therefore the children's minds must always be occupied with something. If the teacher will only take the trouble of finding out what they are thinking about she will soon get a conversation started. Hearing children who are growing up in lonely homes and among surroundings that are entirely void of interest learn to talk. Why should not deaf children find enough to talk about? No matter how small an institution is, life in it can never be so lonely and uneventful as it is in some families.

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THE IDEAL SCHOOL FOR THE DEAF.

ONE of the definitions of beauty given by writers on æsthetics is "variety in unity." In the production of a beautiful whole, monotony, dull uniformity, will be avoided, while the component parts, differing, as each does from the others, will be so arranged, their relative proportions so balanced, as to give an effect not only of harmony, but of unity. Beauty has been called "a harmonious fitness of things." And we certainly receive an impression of beauty when we observe any complex organization, mechanical, physical, or moral, in which each part joins with every other in securing by the best possible means a felicitous and worthy end.

From what object of human devising can the mind receive a more lofty and vivid impression of beauty than from a perfectly organized and equipped institution for the education of the young? Conceive such an establishment, with buildings and grounds of ample size, absolutely adapted to their purpose, perfect in sanitary arrangement, with officers and instructors of the highest character and intelligence, with methods of teaching and management absolutely fitted to the capacity of those to be educated, certain to secure the highest possible development of the pupils, morally, intellectually, physically, and socially: what mind would not be thrilled with joy at the thought of the multitude of youth that would, in the lapse of years, go out from such a school to bless the world with the culture there obtained?

That such an ideal establishment exists among the schools for the deaf in America cannot, as yet, be asserted, but that a sufficient variety in method exists in the several schools to preclude all fear of the "monotony" and "dull uniformity" which kills beauty is certainly true. And it is the object of this article to consider the possibility of so combining the existing variety of method in teaching the deaf into a unity of system as to produce the ideal or model school, which shall not fail to inspire that impression of beauty we have said accompanies a perfect example of the adaptation of means to ends.

When the writer, as a boy of eighteen, "tried his 'prentice hand" on an advanced class in the Hartford school for the deaf, he found that school, in the winter of 1855-'6, exceedingly

well equipped for its work. Its grounds were of sufficient size, and its buildings, though teaching nothing through beauty of architecture, were of ample extent and conveniently arranged.

The management of the institution was in able and experienced hands. At its head was the Rev. William W. Turner, a graduate of Yale College and an associate and pupil of Thomas Hopkins Gallaudet. Dr. Turner had enjoyed a long experience as a practical instructor. He was such a master of the language of signs and its genius that he could communicate readily even with the uninstructed deaf who had just crossed the threshold of the school. The school had a flourishing high class under the direction of Jared A. Ayres, of wide and honorable fame in our profession. In this class were many who later gained prominence as men and women of high intelligence and culture, among whom may be mentioned Messrs. Ballard, Denison, S. T. Greene, Kavanaugh, Hotchkiss, F. C. Davis, and Draper, and Mesdames Agnes Holmes Smith, Lizzie Lindsay Denison, Sarah M. Davis, and P. A. Emery.

Among the instructors of the school were the veteran Laurent Clerc, still full of vigor and interest in his work ; with Messrs. Porter, Camp, Keep, Bull, Storrs, and Whiton, all men of culture and experience. And not less successful as teachers were Mrs. Bacon and the Misses Mann and Storrs. As a teacher of articulation and lip-reading, Miss Eliza H. Wadsworth (now Mrs. J. L. Noyes) was doing excellent work. Accomplished masters in art and in penmanship were employed, as also in the mechanic arts of cabinet-making, shoe-making, and tailoring.

Entering the profession, as the writer did, amid such surroundings, he received impressions at once stimulating and satisfying as to the high dignity of the work of educating the deaf, and as to the completeness and value of the system then pursued in the Hartford School.

This system included a judicious use of the language of signs, both in the school-room and in the lecture-hall ; its free use among the pupils, with the effect to hasten the mental development of the younger by their easy intercourse with the older ; careful instruction in verbal language through writing, reading, and much manual spelling ; a course of instruction covering the ground gone over in the primary and high

schools for the hearing ; careful undenominational training in religion, with interesting Sabbath services ; some physical culture, though not as much as would be considered necessary to-day ; industrial training of sufficient variety, and instruction in speech and speech-reading to all semi-mutes and a few congenital mutes of exceptional brightness.

The results of the system, with which the writer became first acquainted in 1855, have been, in all essentials, satisfactory. The boys and girls of that period are intelligent, self-supporting, respected, happy members of society to-day. The writer had the pleasure of shaking scores of them by the hand at the reunion of Hartford graduates and others on the 31st of August, when the seventy-fifth anniversary of the Hartford school was celebrated. Many of them were his own pupils, whose faces were bright with happy memories of the school-days, the training of which had given them the possibility of the useful and honorable lives they have led.

When the question is asked, What was lacking to make the Hartford School in 1856 a model school for the deaf?—to the writer, in the light of the experience of the years which have passed since that day, the answer seems easily given. And it will be given later on in this article.

During the decade following the years above named, efforts were made, as is well known, to give the teaching of speech greater prominence in the education of the deaf in this country, and in 1867 two schools were organized, which have since become well established, at Northampton, Mass., and in New York city, in which oral instruction has been accorded the place of first importance.

During that same year it was the writer's privilege to visit between forty and fifty schools for the deaf in Europe, in which he met with the greatest possible variety of method. There were manual schools and oral schools ; schools of the former class in which a little oral teaching was done, and others in which all speech teaching was looked upon with scorn ; schools of the latter class in which the use of the language of gestures played an important part, and others from which it was as rigidly quarantined as the plague would have been. And there was one place where an oral school and a manual school existed not far removed from each other, both under a management which effected the transfer of pupils from one to the other, so that each should receive instruction under the method which proved most helpful.

In reporting upon the work inspected in these European schools the writer gave his decided preference to those whose methods allowed them to be classified as pursuing *a combined system*. In them he found all due importance attached to the teaching of speech, while the fact was freely acknowledged that many of the deaf could not be taught articulation with success, and in the same schools he found the language of signs playing a more or less important part in the work of education.

The term "combined system," first used, it is believed, in the writer's report on European schools, has been accepted in this country, and is to-day applied to the schools in which nearly eighty-four per cent. of the deaf children of North America are receiving their education.

Since his examination of European schools, in 1867, the writer has taken many opportunities of observing the results of the several methods and combinations of methods made use of in this country, and has held himself open to a revision of the views he then adopted and expressed, should he find reason for such a change.

And it seems to him reasonable that, after twenty-five years of independent and unrestricted effort on lines often widely divergent, it should now be possible to effect a process of natural selection by which all elements of weakness should be eliminated, and the elements of strength existing in no inconsiderable variety should be so combined as to form a unity that shall stand a monument of beauty for all coming time. What, then, shall be the ideal school for the deaf? May it be the Hartford School as the writer found it in 1855?

Not many months ago the principal of one of the oldest of our oral schools, in commenting on the progress of oral teaching, said to the writer: "If the Hartford School had done thirty years ago what it is doing now in articulation teaching, there never would have been an oral school founded in the country."

May it be said, then, that if the Hartford School in 1855-'6, instead of having one teacher of articulation, with an attendance of two hundred and fifty pupils, had employed six, its condition at that period might serve as a model in the work of educating the deaf? It is the mature judgment of the writer that this question may be answered in the affirmative with emphasis and without reservation.

There are some schools for the deaf which limit themselves

to the single method of pure oralism. How far short these schools fall of being models or ideals may be easily understood when it is considered that in them the natural language of the deaf is banished from lecture-hall and school-room and relegated to a use by the pupils on the play-ground and in the study-room, often surreptitious; that few, if any, of the teachers in these schools have any knowledge of the language of gestures, and hence are often wholly unable to communicate with their pupils under circumstances when it is often of first importance that they should be able to understand and make themselves understood; that in these schools pupils incapable of success in speech are often detained, to their lasting detriment, when they ought to be taught in other ways than are available in a pure oral school; that in these schools deaf children are often encouraged to be ashamed of being deaf, and to scorn as their inferiors deaf-mutes who cannot speak.

That a pure manual school cannot be taken as a model goes without saying, for it fails to attempt, even, to give speech to any of its pupils—thus depriving a very considerable number of a most valuable accomplishment. What, then, are the conditions essential to a model school for the deaf?

1. It should be a boarding-school, for deaf children need special training and instruction outside of the hours of school, which they cannot, or at least do not, receive in the homes from which they mostly come.

2. It should be under the charge of a man well versed in *all* the methods of teaching the deaf, including a thorough familiarity with the language of signs. He should also be a man of earnest religious convictions, prepared to inspire and develop veneration for God and the highest moral aims.

3. All the teachers should have a good knowledge of the language of signs; a majority should be highly educated persons, some of them being deaf themselves.

4. There should be a department, or classes, in which pupils can be trained from the start by the oral method, and every pupil should have a full opportunity of acquiring speech.

5. Only those pupils should be retained permanently in the oral department or classes who are unquestionably successful in speech and lip-reading.

6. All pupils in manual classes who can attain even a moderate degree of success in speech should continue to have instruction in that branch.

7. Orally-taught pupils should have the benefit of lectures and religious services in the sign-language.

8. No effort should be made or allowed to discredit or disgrace the language of signs, and its use out of school should not be *forbidden*, even to pupils taught in oral departments or classes. At the same time all due influence should be exerted to induce pupils to communicate largely with each other by speech and manual spelling, so soon as their attainments render such communication practicable.

9. The course of study should be so arranged as to give all pupils the opportunity of reaching the point of advancement required for admission to the best high schools for the hearing, and provision should be made for carrying such as prove capable and deserving through a high-school course quite up to the point of fitness to enter the freshman class of the College at Washington.

10. Full opportunities should be given for industrial training, and for the development of any talent in art that may be found to exist among the pupils.

11. Thorough and systematic physical training should be provided for.

12. Religious instruction of an undenominational character should occupy a prominent and honored place, and this instruction should be given in the language through which alone the mind and heart of the deaf can be moved and impressed as the mind and heart of the hearing are through audible speech.

In the opinion of the writer the time has come when the public should be made fully to understand that no school for the deaf which holds to a single method, and rejects either the language of signs or speech, has a right to assume that it can educate the deaf as a class.

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THE SEVENTH CONFERENCE OF PRINCIPALS AND SUPERINTENDENTS OF AMERICAN INSTITUTIONS FOR THE EDUCATION OF THE DEAF.

THE Seventh Conference of Principals and Superintendents of American Institutions for the Education of the Deaf was held at the Colorado Institution, Colorado Springs, Colo., August 8-11, 1892. Notwithstanding the great distance from the majority of the schools, the attendance was larger than at any previous Conference. Thirty-two principals and superintendents in active service were present as regular members; there were also ex principals and ex-superintendents, members of boards of trust, State officers, members of the families of regular members, and invited guests, making the total attendance seventy-nine.

The majority of the delegates went from Chicago in a special train arranged for with much thought and labor by Dr. P. G. Gillett, superintendent of the Illinois Institution. On this journey, as well as during the recesses of the Conference, there was abundant opportunity for the pleasant social intercourse and the informal exchange of views which constitute an important element in the value of such gatherings.

The hospitality of the Colorado school was generous and hearty. Mr. J. E. Ray, the efficient superintendent, together with the trustees, who were in constant attendance, the matron, and other officers did everything in their power to promote the comfort and pleasure of their guests. The residents of the beautiful city of Colorado Springs also contributed by their cordial welcome and thoughtful courtesy to the enjoyment of the occasion. It was a pleasant surprise for the many members of the Conference who visited the school on their way to the California Convention, six years ago, to see the great improvements which have been made in the buildings and grounds since that time. The commodious new school building, with its excellent equipment for work, was especially admired.

The election of Dr. I. L. Peet as President of the Conference was a fitting tribute to his long and useful service in the profession. By a happy coincidence it occurred on the twenty-fifth anniversary of his succession to the principalship of the New York Institution, and so, as he said on taking the chair, might be regarded as a sort of silver-wedding present.

The principal papers read were "Values in the Education of the Deaf" and "A Message from the Home of Heinicke," by E. M. Gallaudet, President of the National College; "The Condition of Articulation Teaching in America" and "The Classification of Methods of Instruction," by Dr. A. G. Bell, of Washington; "A Technical School for the Deaf," by Mr. F. D. Clarke, Principal of the Arkansas Institute; and "The Presentation of Language," by Mr. J. A. Gillespie, Principal of the Nebraska Institute. There were also interesting addresses on "The Lyon Phonetic Manual" and "A Method of Teaching Numbers," by Mr. Edmund Lyon, of Rochester, N. Y.; "The Use of the Phonograph in the Indiana Institution," by Mr. R. O. Johnson, Superintendent of that Institution; "Schools for the Deaf in Europe," by Dr. Warring Wilkinson, Principal of the California Institution; "A Few Words from the College at Washington," by President Gallaudet; "The Exhibition of Schools for the Deaf in the World's Columbian Exposition of 1893," by President Gallaudet and Dr. Gillett; "The World's Congress of Instructors of the Deaf in 1893," by Dr. J. L. Noyes, Superintendent of the Minnesota School, and Mr. A. L. E. Crouter, Principal of the Pennsylvania Institution; and addresses of welcome by Judge Daniel Hawks, of the Board of Trustees of the Colorado School, who was elected temporary chairman, the Rev. James B. Gregg and Mayor Sprague, of Colorado Springs, with responses by Dr. Wilkinson, Mr. R. Mathison, Superintendent of the Ontario Institution, Dr. J. H. Johnson, Principal of the Alabama Institute, and Dr. Gillett.

President Gallaudet's paper on "Values" was not identical with the article bearing the same title noticed in the last number of the *Annals*, but was supplementary to it, citing the opinions of eminent instructors of various schools in support of the views therein expressed, and supplying certain omissions in the article as printed. His "Message from the Home of Heinicke," reported the proceedings of an association of the deaf in Leipsic, showing their dissatisfaction with the results of the method of instruction prevailing in that country. Dr. Bell's paper on "The Condition of Articulation Teaching in America" demonstrated by statistics compiled from the *Annals* and collected from heads of schools the progress which has been made in articulation teaching in the United States and Canada within recent years, especially with the younger pupils and in the direction of using speech as a means of instruction.

These papers gave rise to an animated discussion of the limitations of the oral method, and of the value of the sign-language in the education of the deaf, which was marked by the earnestness and warmth, and at the same time by the courtesy and friendliness, which have been characteristic of nearly all the discussions of the subject in this country. No resolutions were proposed in connection with the discussion, but the following, offered near the close of the Conference by Mr. N. F. Walker, Superintendent of the South Carolina Institution, was adopted without opposition :

Resolved, 'That it is the sense of this Conference that, in all schools for the deaf, pupils who are able to articulate fluently and intelligently should recite orally in their classes, and be encouraged to use their vocal organs on every possible occasion.

Dr. Bell's paper on "The Classification of Methods" proposed tentatively that the classification should be based on the language employed to impart ideas, thus dividing the methods into "two broad classes, employing (1) English and (2) other languages (sign-language); these to be further divided according to the specific methods of instruction, as (1) oral methods, divided into the auricular method and the speech-reading method, (2) manual methods (the manual alphabet method), and (3) sign methods (the De l'Épée sign-language method)." After some general discussion of the subject, the following resolution, offered by Dr. Noyes, was adopted :

Resolved, That a committee of three be appointed, of which Dr. E. A. Fay, of Washington, shall be chairman, and the other two members shall be appointed by the Conference, to which committee the whole subject of classification shall be referred, to report their conclusions through the *Annals*, and when three-fourths of the institutions of the United States approve of the recommendations of this committee, the same shall be adopted in the *Annals*.

Dr. Noyes and Dr. Bell were appointed as the other two members of this committee.

Mr. Clarke's paper, on "A Technical School," maintained the importance of establishing "a free technical and industrial school for the deaf of the whole nation, where instruction should be given in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life," and urged that the General Government be asked to provide such an institution.

The discussion that followed developed considerable difference of opinion on the part of the principals and superintendents. Some favored Mr. Clarke's plan, others regarded it as impracticable: some believed industries could best be taught, as at present, in connection with the State institutions, and others thought Mr. Clarke's plan might be carried out, with some modifications, in connection with the National College. The following resolutions were finally adopted:

Resolved, That we feel the great need of a free technical and industrial school for the deaf of our whole nation, where instruction shall be given in "agriculture," the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their application in the industries of life, and such useful handicraft as can be taught in a school.

Resolved, That, as the General Government has recognized by liberal appropriations the value of such colleges and institutions for normal youths, we hope that it will be possible to find some means of providing such a one for the deaf of the whole nation.

Resolved, That a committee be appointed by our chairman, who shall decide upon the general course of instruction at such an institute, its methods of government, the requirements of entrance as a student, the apportionment of students among the different States and Territories, the proper location, and the amount necessary to establish and maintain it, and who shall embody such decisions in a circular, to be sent to the head of each school for the deaf in the country, with the committee's advice as to the best method of obtaining the money necessary to secure the end in view, this committee to report at the next meeting of this Conference, and

Resolved, That each of us pledge ourselves to do all in our power to hasten the time when the school can open its doors to students.

The committee appointed in accordance with these resolutions consists of Mr. Clarke, President Gallaudet, Mr. W. A. Caldwell, Principal of the Florida Institute, Mr. A. L. E. Crouter, and Mr. R. O. Johnson.

As Mr. Gillespie's paper on "The Presentation of Language" was originally written for the *Annals* (having arrived too late for the last number, it was withdrawn to be read at the Conference), and as it presents a subject of special interest to teachers, we have obtained permission to print it. It gives us pleasure to refer our readers to the paper itself in the present number of the *Annals*.

Mr. Lyon's presentation of his *Phonetic Manual* (*Annals*, xxvii, 53), and the explanation of his device for teaching numbers, led to the adoption of the following resolution, offered by Miss Sarah Fuller, Principal of the Horace Mann School:

Resolved, That the thanks of the Conference are tendered Mr. Edmund Lyon for his attendance upon the sessions of the Conference, and his explanation of the Lyon Phonetic Manual, which is ingenious and philosophical, and which, it is believed, may be used as a valuable aid in the instruction of the deaf in articulation and speech-reading; and that we also thank him for the explanation of his device for teaching small children the elements of arithmetic.

Mr. Johnson's account of the experiments made with the phonograph in the Indiana Institution and the discussion that followed showed the possible uses of this instrument, and of the kindred graphophone, in schools for the deaf in testing the degree of audition, arousing dormant hearing power, recording progress in articulation, and other ways. The experiments are to be continued in the Indiana Institution.

Dr. Wilkinson's informal address, giving the results of his observations of European schools during the past year, was listened to with deep interest. As Dr. Wilkinson has promised to prepare an article for the *Annals* on this subject we will not attempt any report of his address, except to record the conviction he expressed, that the United States are far in advance of any European country in the provision made for the education of the deaf.

President Gallaudet's "Words from the College at Washington" related especially to the recent establishment of the Normal Department and the provision made for teaching speech and speech reading. Mr. S. T. Walker, Superintendent of the Kansas Institution, offered a resolution, which was adopted, requesting the directors of the College to make provision, if possible, for the travelling expenses of indigent students living in remote States. Mr. Clarke stated that in Arkansas the provision for travelling expenses, etc., of pupils in the Institution had been extended by the legislature to students attending the College from that State, and suggested that a similar amendment to existing laws might be enacted in other States.

President Gallaudet and Dr. Gillett, in behalf of the Executive Committee, laid before the Conference the results of a recent consultation between the Committee and Dr. Peabody, who is in charge of the Department of Liberal Arts of the World's Columbian Exposition. Dr. Peabody expresses a willingness to grant sufficient space for such exhibit as the schools for the deaf may desire to make. It is proposed to have an "active exhibit" of pupils from various schools, show-

ing the actual work of the school-room, and a "physical exhibit," illustrating the methods and results of instruction in both class rooms and shops. There was some difference of opinion as to whether it would be more desirable to make the exhibit of deaf-mute instruction in a single group, or in connection with the various State exhibits. Dr. Peabody favors the plan of a single group, but it was feared by some members of the Conference that it would be impossible to obtain the necessary State appropriations in some cases unless the work were shown as a part of the State exhibit. Dr. Bell, in behalf of the American Association to Promote the Teaching of Speech, expressed a desire to co-operate in the exhibit. Mr. Ray was requested to publish the whole discussion on this subject as soon as possible in the *Colorado Index*. The following resolution, offered by Mr. W. A. Kendall, Superintendent of the Texas School, was adopted :

Resolved, That the subject of an exhibit of all institutions and associations earnestly engaged in the education and uplifting of the deaf be referred to the Standing Executive Committee with authority to arrange with the chief of the Department of Liberal Arts of the Columbian Exposition for such physical and active exhibits as may be found practicable.

The subject of the World's Congress of Instructors, including an informal report of the programme of exercises so far as it has been arranged, was presented by Dr. Noyes, chairman of the Committee on Programme, and Mr. Crouter, who will have charge of the Normal Department. The programme will be published as soon as it is completed. The following resolutions, offered by Mr. Crouter, were adopted :

Resolved, That we, the superintendents, principals, and directors of the American institutions for the deaf in conference assembled, recognizing the worth of Dr. P. G. Gillett, of Illinois, as an educator of the deaf, and the extent and value of his services in the cause of their instruction, respectfully recommend his appointment as president of the auxiliary Congress of Instructors of the Deaf to be held in connection with the Columbian Exposition at Chicago ; and

Resolved. That the officers of this Conference transmit this expression of our sentiments to the officials of the Columbian Exposition.

The stenographic report of the proceedings of the Conference will be published by the Colorado Institution as soon as possible.

E. A. F.

THE SECOND SUMMER MEETING OF THE AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF.

THE American Association to Promote the Teaching of Speech to the Deaf is exceedingly fortunate in its title. The name defines clearly the object of the Association and at the same time limits the field of its work. The field at its boundaries touches the boundaries of other fields, but it does not encroach upon them. The work is to supplement or to complement the work doing in other fields, and thereby to make all work done more effective of desired results. To promote speech-teaching is not to promulgate a sentiment or to arouse an interest favorable to speech-teaching, but rather to promulgate methods and to train workers to greater efficiency. The results must be to give better speech to all taught speech, and good speech to an increased and constantly increasing number.

The possibility of speech-learning sets the limits within which every friend of the deaf becomes a willing and an earnest promoter of speech-teaching; the measure of possibility is a matter of individual belief, and each promoter determines it for himself. Whether the measure be large or small is here of little moment; the same spirit, the same effort, and the same means must be employed to overcome the difficulties which the work under all conditions of possibility presents. Hence workers of all schools and of all shades of belief may join in association to promote the teaching of speech, each and all laboring to the same end, actuated with the one desire and purpose—to secure intelligent and intelligible speech to the largest possible number. It is by association men accomplish great things—greater things than by their individual and divided efforts. To promote the accomplishment of greater things in speech-teaching may then well enlist workers in association. In teaching we learn far more from one another than we individually are able to devise and discover for ourselves. An association of workers makes possible an exchange of thought and experiences under the most favorable conditions, with the result that the best knowledge of each becomes the common knowledge of all. Moreover, by bringing together thus, in the pursuit of a common purpose,

workers of different schools and by different methods, there is opportunity for comparison of results and for generous and friendly criticism that cannot but make for good in the grand summing up of educational accomplishments. Thus speech is coming to be, has come to be, more than mere syllables and words and the power to utter them. Speech in its broad sense is education ; therefore to give speech is to educate. Speech is a form of language, and its possession implies and includes the power to use it as an instrument of thought and as a medium for thought expression. Speech is all that language is and more—it is language with the added power of utterance. Not all the deaf who can learn language can master its speech form ; but all who can acquire speech can, at the same time, gain all of knowledge and of discipline that the study of language brings, and all of power that the mastery of language confers. The greater includes the less : the whole, all its parts. This high estimate of speech tends in speech-teaching to shape methods more and more to the production of the best educational results.

The Second Summer Meeting of the American Association, held at Lake George, June 29 to July 9, was in no way in marked contrast with the first, either in its proceedings or its results. The plan and order of the first meeting furnished for the second opportunity only for minor changes such as experience and wise consideration suggested. A change, however, was noticed in the feeling that prevailed ; at the first meeting the feeling was of uncertainty and doubt ; all was experiment, and there was strange newness in purposes and means. At the second meeting all had been tried and proved, and the feeling was of satisfaction and confidence ; purposes had become clear, and they had met with unanimous and wide acceptance ; means were adequate, and co-operation was offered from every hand.

It would be difficult to follow the course or to define the character of the instruction given at the summer school. The school is the Association at work. Instructors, able and well equipped, give of the wealth of their knowledge and experience, and a practice school illustrates methods and makes demonstration of their effectiveness. Accomplishment is shown and measured in pupils of schools and in graduates whose speech is at once the instrument of a cultured intelligence and the evidence of it.

The practice school as conducted is the one feature that overshadows all others in interest and value to the practical teacher. Here stands out in bold relief the distinctive character of methods employed, and here is revealed the secret of the wonderful successes that have attended the best instruction. It is easy to see that the essential factor in the problem of speech-teaching is a good method in the hands of a good teacher. Failure to learn speech obviously is too often the result merely of failure to teach speech.

The Association is perhaps doing no work more promotive of its object than when it enlists in its service men of learning in lines of study that parallel and bear upon the work of speech-teaching. Medical science may well contribute of its store of knowledge to aid in correcting or alleviating that which it has for ages striven in vain to cure. Now for the first time are the empiric and the scientist brought into association in the study of the problems involved in the production of artificial speech. Exact knowledge of the anatomy and the physiology of the speech organs, together with that rarer knowledge of the relations of the various mechanical and intellectual factors of speech production, can be given only by trained and skilled specialists. Such the Association has found in Dr. Allen and Dr. Hewson, who are not only physicians of eminence, but are skilled and successful teachers as well. To enlist the interest of scientists and to divert them in their study and investigation to the problem of speech production may not have been a purpose of the Association, nevertheless it cannot fail to be a result of the policy of bringing such men into the active work of instruction.

To teach speech and to educate by speech require exceptional skill and teaching ability of the highest order. Nothing has been evidenced more plainly in the summer meetings than this truth. The meetings have shown what great skill and great ability may accomplish, and by such showing have educated demand. Never before have principals seeking teachers been so discriminating. They want the best teachers and will be satisfied only with the best. The Association, in recognition of the demand, made request to the directors of the Clarke Institution, at Northampton, Mass., to establish and maintain a normal training class. The request has met with favorable action and the class will be established. Without doubt the result of this move will be a great increase in the supply of

skilled and trained teachers. The Clarke Institution is the oldest oral school in the country, and one of the best. Its management is thorough and in every way competent; moreover, there is reason to believe that only real ability and skill, as discovered and developed, will receive certification at its hands.

F. W. BOOTH, B. S.,

*Chief Instructor of the Primary Department
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NOTICES OF PUBLICATIONS.

AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF. Report of the Proceedings of the First Summer Meeting held at Lake George, N. Y., from the first to the tenth of July, 1891. Rochester, N. Y.: Western New York Institution for Deaf-Mutes. 1892. 8vo, pp. 437.

A handsomely printed volume giving the full stenographic report of the interesting and profitable meeting described in the last volume of the *Annals*, pp. 274–282. The lectures on the anatomy and functions of the vocal organs, visible speech, etc., are abundantly illustrated by engravings, and photo-lithographs of the buildings and grounds at Lake George add to the attractiveness of the volume. A carefully prepared index renders the contents easy of reference.

BÉLANGER, AD. *La Lecture sur les Lèvres mise à la portée des personnes devenues sourdes* [Lip-Reading put within the reach of persons who have become deaf]. Paris: Imprimerie Eug. Bélanger. 1891. 8vo, pp. 24.

This treatise is intended for the special benefit of persons who have lost their hearing after having acquired a command of language through the ear. Mr. Bélanger, an instructor in the National Institution at Paris, explains the positions and movements of the organs of speech in the formation of the various sounds of the French language, and shows how they can be distinguished from one another by the eye of the deaf observer. He teaches the vowels before the consonants. The consonants he divides into two distinct groups: (1) those in which the lips play a certain part, either in consequence of their action or by the positions they assume, viz., P, B, M,—CH, J,—F, and V; and (2) those in which the lips have no influence on the articulation, but the tongue plays the active part, viz.,

T, D, N,—L, R lingual,—S, Z,—C, G, GN, ILL, R guttural. He begins by teaching the positions of the sounds which present the most marked differences, as A, O, I, among the vowels, and P, F, CH, T, L, S, C (K), among the consonants. When the pupil has learned to distinguish a few vowels and consonants, he is practised on combinations of sounds in the following order :

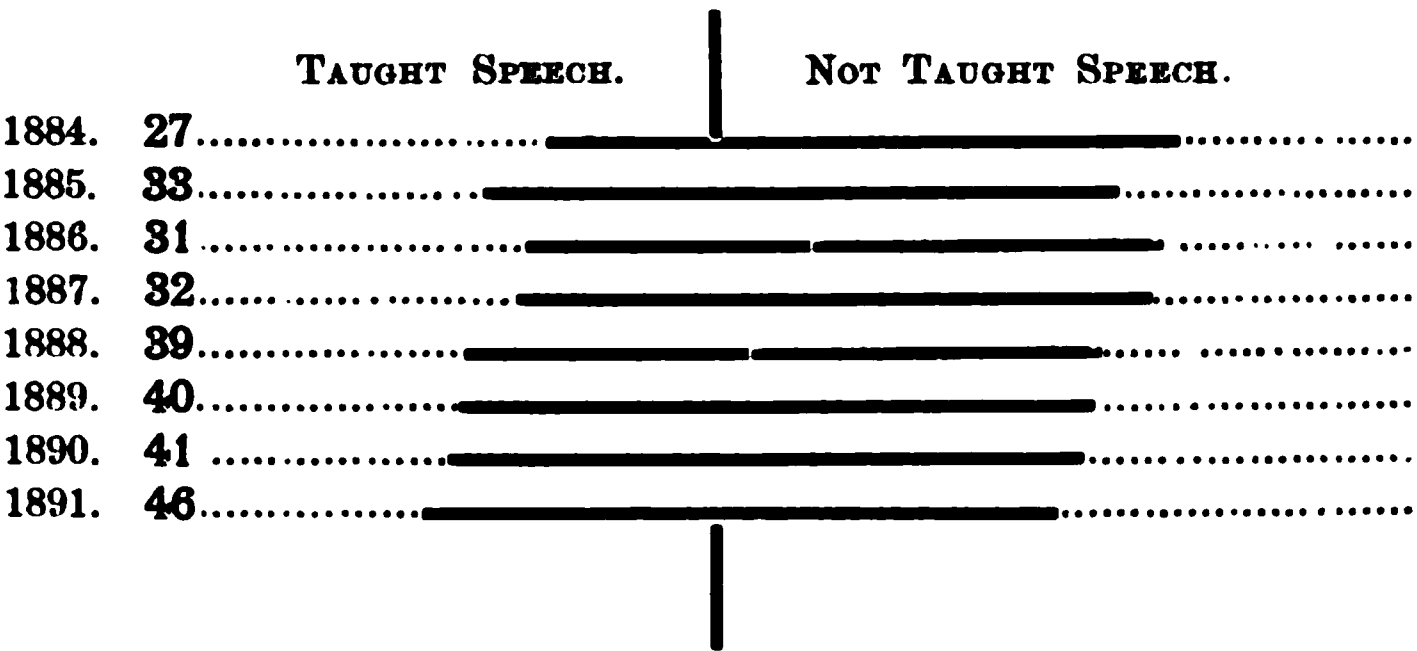
1. Simple syllables beginning with a consonant (*fa*).
2. Simple syllables ending with a consonant (*och*).
3. Repetition of the same syllable (*toutou*).
4. A consonant between two similar vowels (*apa*).
5. A consonant between two different vowels (*oté*).
6. A vowel between two similar consonants (*tot*).
7. A vowel between two different consonants (*cap*).
8. Two syllables, consonants different, vowels similar (*cata*).
9. Two syllables, vowels different, consonants similar (*papi*).
10. Two syllables composed of different elements (*sali, fâché*).
11. Syllables containing diphthongs (*pia, loui*).
12. Syllables containing double consonants (*pla, clo, tri, spé*).
13. Syllables containing three consonants (*spla, scra, scri*).
14. Two syllables, one simple, the other with a double articulation (*nopli, astré, capri*).
15. Groups of three, four, five syllables.

Each vowel is carefully considered not only as to its own appearance, but also as to its influence upon the several consonants with which it may be combined.

BELL, ALEXANDER GRAHAM. Opening address of the President of the American Association to Promote the Teaching of Speech to the Deaf, delivered at Crosbyside, Lake George, N. Y., June 29, 1892. 8vo, pp. 54.

— Speech-Teaching in American Schools for the Deaf. Statistics from the "American Annals of the Deaf."

The subject of Dr. Bell's address is the condition of articulation teaching in American schools for the deaf. It shows by statistics drawn from the *Annals* the number and proportion of pupils taught speech in each of the American schools for the deaf since 1884, when statistics concerning articulation teaching were published in the *Annals* for the first time. The percentage of pupils taught speech is shown by a simple but ingenious device of graphical charts. The following chart gives the percentage for all the schools of the country:



It would be an improvement if the tables showing the number of pupils in each school were placed side by side with the corresponding graphical charts showing the percentages, instead of being in a different part of the appendix, since the importance of percentages always depends largely on the numbers which they represent.

Other tables show the number and percentage of hearing teachers and of articulation teachers, the number of new pupils admitted during the last school year, the number and percentage of new pupils taught speech, and the number and percentage of these taught *by* speech. With respect to new pupils, replies were received from schools containing 7,987 pupils, or 80 per cent. of the whole number under instruction. Into these schools 836 new pupils were admitted, of whom 580, or 69 per cent., were taught speech, and 363, or 43 per cent., were taught *by* speech. These percentages, however, are probably excessive, as Dr. Bell remarks, because the schools which did the most work in articulation teaching were the most ready to respond to inquiries.

Dr. Bell quotes with approval the opinion of Dr. Job Williams expressed in the last annual report of the American Asylum, that "any pupil who has mastered speech and lip-reading so far as to be able to carry on conversation in regard to the ordinary affairs of life in speech so plain as to be readily understood by the members of his own family, even though others fail to understand him, should be counted as a successful articulator and lip-reader;" maintains that the parents and friends at home are the proper persons to decide the value and success of the articulation taught, and suggests that correspondence be kept up with former pupils, and that statistics be collected showing their earnings, distinguishing the earnings

of those who can speak and read speech from those who cannot.

The statistics and graphical charts of the second publication above named, which are published without comment, are included in the appendix to the Address.

DAVIDSON, SAMUEL GASTON. *The Discussion and Results of Oral Work.* Philadelphia: Edward Stern & Co., printers. 1892. 8vo, pp. 15.

A paper read before the Teachers' Association of the Pennsylvania Institution and printed by request of the members. Mr. Davidson urges his fellow-teachers to consider the merits of the oral method without prejudice, and to form their conclusions only after a careful consideration of all the facts, especially the condition and progress of the pupils after leaving school. All will agree in his conception of the best method of instruction, however widely they may differ in opinion as to what that method is:

The best method is the one that wears best—the one that enables our pupils to best mingle with and make their way in the world; that carries them highest, farthest, and longest on their way towards intellectual, spiritual, and physical perfection and happiness, and the demonstration of its superiority must come *after* school, not in school.

As a contribution to the investigation of the condition and progress of pupils after leaving school, Mr. Davidson submits extracts from several letters (not written for publication) by graduates of oral schools, and, for comparison with them, letters and compositions written by the same persons while they were in school or soon after graduation. In all cases their later work shows a marked improvement in language, and this Mr. Davidson attributes to their association with hearing people and their consequent absorption and repetition of correct forms of speech. He also gives the following statistics concerning a society in New York city composed of graduates of the New York Institution for Improved Instruction, to show the wide range and high character of the occupations their education enables them to follow:

There are 45 members. Their time in school ranges from 3 to 13 years. The average would be about 7 or 8 years. The proceedings of the society are conducted through signs. Of these 45, 11 were born deaf, 7 lost their hearing at 1 year or under, 14 under 2 years, making 32 who were as good as born deaf. Their occupations are: Shirt cutter, 1; silk weaver, 1; dealer in fancy paper, 1; piano makers, 3; undertaker, 1; contractor's

clerk, 1; butcher, 1; engraver, 1; mercantile photographer, 1; insurance clerk, 1; silver-chaser, 1; moulders, 2; clerks, 2; carpenter, 1; fur importer and dealer, 1; cabinet-makers, 2; electrical instrument maker, 1; commission-house clerk, 1; lithographers, 3; bookbinder, 1; piano polisher, 1; assistant superintendent of oral school, 1; student, 1; enameller of jewelry, 1; artist, 1; lithograph press-feeder, 1; engraver on wood, 1; book-packer, 1; electrotyper, 1; starter on horse-car line, 1; cloth sponger, 1; compositor, 1; while two are men of leisure.

FERRERI, G. *Di Alcune Quistioni intorno all' Educazione dei Sordomuti* [Some Questions relating to the Education of Deaf-Mutes]. Siena: S. Bernardino. 1892. 8vo, pp. 89.

The chief questions discussed by Mr. Ferreri, the Vice-Director of the Pendola (Siena) Institution, in this valuable treatise are the deaf-mute and society, the condition of the deaf before instruction, the special care required by their physical, intellectual, and moral conditions, their industrial education, and their social condition. Among the subordinate topics considered are the rights of the deaf to education; a sketch of the history of their education in Italy; instruction at home; juvenile asylums, day-schools, and boarding-schools; civil rights, military conscription, marriage, and the consanguinity of parents.

Mr. Ferreri draws a gloomy picture of the present provision for the education of the deaf in Italy, and sees little hope of improvement in the near future. In 1887 there were 15,300 deaf-mutes in the country, and only 1,671 of them were under instruction. The government recognizes the importance and need of education, but other demands upon the treasury and the grievous financial burdens already imposed upon the people lead them to defer the claims of the deaf indefinitely.

Mr. Ferreri admits the value of home instruction in the rare cases where it is feasible, but gives the preference to boarding-schools over day-schools. The co-education of deaf and hearing children he regards as entirely impracticable. He urges strongly the importance of industrial training.

We are surprised to learn that the deaf from birth, even after education, are still denied civil rights in Italy, and that exemption from military service is possible only in the case of total deafness in both ears. Mr. Ferreri pleads earnestly for reform in these respects.

On the questions of marriage and the consanguinity of parents, Mr. Ferreri expresses himself cautiously, desiring further statistics before forming an absolute conclusion. He

remarks incidentally that the majority of Italian deaf-mutes, including nearly all the women, resign themselves to celibacy as soon as they have had a little experience of life.

Mr. Ferreri is an adherent of the oral method, but in this treatise he does not discuss methods, inasmuch as that subject had been assigned to him for the Congress to be held at Genoa in September.

VAN PRAAGH, WILLIAM. *Deaf and Dumb.* An article in *Cassell's Storehouse of General Information*, pp. 349-352. Cassell & Company, London.

— *Lip-Reading.* Fourth edition. Reprinted from the *Quarterly Review for Deaf-Mute Education*, with additional notes. London: 11 Fitzroy Square. 8vo, pp. 7.

In his article on the “Deaf and Dumb”—a term which he admits is a misnomer—Mr. Van Praagh makes the following careful classification of the partially deaf:

The partially deaf are divided into five classes; that is, into (*a*) those who perceive the human voice when it is used close to the ear, without being able, however, to distinguish the separate sounds; (*b*) those who can distinguish the vowels when they are loudly pronounced in the ear; (*c*) those who understand (but with difficulty) some words known to them when these are clearly pronounced in their ear; (*d*) those who, without effort, understand all that is clearly pronounced in their ear, and finally (*e*) those who can hear the raised voice, but not sufficiently well to follow general conversation, or to attend to what is going on in a class of hearing children. All those coming within this division are fit subjects for schools for the deaf and dumb.

The article is mainly devoted to methods of instruction, of which a brief historical sketch and exposition are given. Mr. Van Praagh is a zealous advocate of the oral method, and bestows upon that method the fullest description and the highest commendation. He upholds it as preferable—

because (1) it emancipates the deaf-mute by giving him the great gift of speech; (2) because it develops the power of understanding what others say; (3) because it teaches language in the natural way; (4) because it extends his means of acquiring knowledge, since every one whom he sees talking and who converses with him becomes to him a teacher, whilst at the same time it destroys the isolation of his life, and makes him better fitted to mingle in general society.

“Lip-Reading” Mr. Van Praagh regards as “the very backbone of the system,” and in the pamphlet bearing that title he earnestly urges its importance:

Great as is the value of speech, that of lip-reading is as great, or greater. * · * · We consider lip-reading the principal object of our

tuition, since the power of understanding what is spoken is of far greater value than the speech itself. * * * Speech to the deaf, without the accompanying power of lip-reading, is of comparatively limited value.

Some useful suggestions are given as to the best means of teaching lip-reading, but Mr. Van Praagh does not attempt to exhaust the subject. His chief object is to impress upon oral teachers its value and importance.

REPORTS OF SCHOOLS (published in 1891: Horace Mann, South Carolina; (published in 1892: Genoa Italy, Llandaff (Wales), Association for Oral Instruction (London, England), Western New York.

E. A. F.

SCHOOL ITEMS.

Albany Home School.—Miss Caroline Marvin, who has taught here for two years, has gone to the Indiana Institution to take charge of an oral class. Two beginners have been appointed in her place.

The *New Albany*, vol. ii, No. 2, has a descriptive article concerning this school, illustrated by a picture of its pleasant new home at Pine Hills.

Arkansas Institute.—Miss Wells left in June to be married. Mr. S. C. Bright accepted a position in the Iowa School, and took Mrs. Bright, the matron, with him. Mr. J. H. Geary resigned on account of his wife's health. These vacancies have been filled by the promotion of other teachers and officers, and by the appointment of Mr. J. W. Michaels, of Virginia, formerly a teacher here, and Miss Emma Macy, late of the Evansville School, as teachers.

Chicago Day-Schools.—Mr. Emery is succeeded as principal by Mr. Oscar Vaught, M. A., a graduate of the Normal Department of the National College.

Clarke Institution.—Miss Fannie Lucas, who has been connected with this Institution for two years, enters the Pennsylvania Institution. Miss Laura H. Wild, a graduate of Smith College, and Miss Hannah Wells, formerly a teacher in the

Hartford School, have been added to the corps of instruction, and Mrs. Marion Smith, a former teacher, returns after an absence of nearly three years.

A new department will be opened in the Institution this fall, a distinct school and family being organized for the youngest grade of pupils, about twenty-five in number.

Colorado School.—Mr. J. A. Tillinghast, M. A., a graduate of the Normal Department of the National College, is added to the corps of teachers in the manual department, and Miss P. E. Burchard, who has taught articulation in Eastern schools for eight years, to the articulation force. Mrs. Lena B. Elder, for twelve years matron of the Academy for Young Ladies at Jacksonville, Ill., succeeds Mrs. McWhorter as matron, and Miss Edith Elder, her daughter, is appointed superintendent's clerk and visitor's attendant. Mr. S. W. Gilbert, who took Mr. Tillinghast's place while he was in the College, goes to the Indiana Institution.

Evansville Day-School.—Mr. Paul Lange, B. A., a recent graduate of the National College, has been appointed principal. Mr. Charles Kerney, the former principal, has been appointed a teacher in the Indiana Institution, and Miss Emma Macy, teacher, goes to the Arkansas Institute.

Florida Institute.—Mrs. Keeler and Miss Hart, teachers of articulation, have resigned, and their places have not yet been filled. Mr. O. D. Whildin, B. A., a recent graduate of the National College, has been appointed foreman of the printing office.

Horace Mann School.—Mrs. Francis Brooks, who since the establishment of the School has been most heartily interested in everything pertaining to its work, died on the thirty-first day of August. Miss Fuller writes that the loss of her presence and of her watchful care to the Home for Little Deaf Children is almost irreparable. "It is but ten months since the death of her husband, who was a constant and generous friend to both schools. Death has taken many friends from us, but never wiser, truer, or more helpful ones than Mr. and Mrs. Francis Brooks."

Illinois Institution.—Mrs. Catharine Bull, for ten years matron and fourteen years assistant matron, resigned her position in June and was succeeded by Miss Sarah D. Gibson, formerly matron of the Wisconsin School.

Iowa School.—Mr. S. C. Bright, formerly instructor in the Arkansas School, has been added to the corps of teachers. Miss Alicia M. Ewing has resigned her position as teacher and the vacancy so caused has been filled by the appointment of Miss Augusta Kruse, a graduate of the School, and for the past two years a student in the National College. Mr. Alexander Hardie, book-keeper, and Miss Caroline Schuff, a teacher, were married September 1. Both will retain their former positions.

An artesian well has been sunk and a new system of steam-heating has been placed in the school-house.

A fire on the 11th of August last destroyed the boiler-house, laundry, and cold-storage house. The loss was about \$20,000.

Kansas Institution.—The following changes are reported in the corps of instructors: Miss Cora E. Coe will no longer teach here. Mr. E. E. Clippinger has resigned to accept a position in the Wisconsin School. Miss Inez Townsend has resigned as articulation teacher, and is now Mrs. Roof, of Colorado, having been married during the vacation. Mr. T. B. Bensted, late of the Wisconsin School, and Miss Eva Ore, of the Illinois School, have been added to the corps to fill the vacancies.

During vacation there has been placed in the industrial department a large wood-turning lathe, a scroll-saw, and a buzz-saw, all to be run by steam.

Michigan School.—Mr. Thomas Monroe, an instructor in the school for the past nine years, has been appointed superintendent in the place of Mr. M. T. Gass. Mr. George W. Cook, Mrs. T. J. Allen, and Miss Emma Monroe have resigned their positions as teachers—Mr. Cook to become the Republican candidate for County Clerk of Genesee County, and Mrs. Allen to assume housekeeping duties. Mr. and Mrs. Thomas P. Clarke, formerly of the Arkansas Institute, Mr. Cyrus M. Pierce, for the past four years supervisor of the boys in this

School, and Miss Bessie M. Garlock, a recent graduate, have been appointed to fill these vacancies.

Mr. Monroe was married on the 17th of August last to Miss Jennie Barney, of Flint, Michigan.

Midland (Derby, England) Institution.—The publication of an illustrated quarterly magazine edited by Mr. Roe, the head master, was begun in June. It is called "Our Deaf and Dumb," and its object is to interest the public in the education of deaf children and in mission work among the adult deaf, to maintain relations with former pupils, and to encourage the pupils to write compositions.

Minnesota School.—On account of the delay in completing Barron Hall, the new dormitory for boys, the term does not begin this year till October 5th. The completion and occupancy of this new building will enable the superintendent to organize the school and systematize the work on a plan he has long desired to carry out, viz., to separate the smaller pupils from the larger and give them better and more commodious quarters than heretofore. In future the primary pupils will occupy sleeping-rooms and sitting-rooms in a building separate and apart from the intermediate and grammar-school grades. The latter will have a large study-room, where they will be relieved of the noise and confusion of the primary pupils, and the former will have rooms well arranged and equipped for the grade to which they belong. The boys will leave the main building and occupy Barron Hall, and the girls of the primary grade will occupy the rooms formerly used by the boys in the north wing of the main building.

Four new school-rooms have been provided and fitted up in a first-class manner, and two new teachers employed—Miss Ruth C. Buxton, of Jacksonville, Ill., and Miss Amy E. Snider, of Lena, Ill. Mr. Guy M. Wilcox, M. A., a graduate of Carleton College and of the Normal Department of the National College, will take the place vacated by Mr. Olof Hanson last term. Mr. Hanson has returned to his chosen profession, that of an architect, and is now at work in Duluth.

Montreal Female Institution.—The Montreal *Semaine Religieuse* recently published an interesting series of articles

concerning this school, its history and present condition. These articles have been reprinted in pamphlet form.

National College.—Mr. Charles R. Ely, M. A., a graduate of Yale University and of the Normal Department of the National College, has been added to the corps of instruction.

Nebraska Institute.—Kindergarten work has been introduced, and Miss Lelia E. Vail, an experienced kindergartner, has been engaged to take charge of it. She begins with a class of about fifteen.

New England Industrial School.—A large two-story, twelve-room house is now in course of erection near the school for the use of the foreman and his family, and of a new teacher who is to be appointed, while a small house with three rooms has been fitted up for a hospital. The additional teacher needed is for articulation.

New Jersey School.—The educational department and the department of building and grounds have been separated. The former will remain under the charge of Mr. Jenkins, who is hereafter to be styled principal. The direction of the industrial classes and the discipline of the pupils at all times remain with the educational department.

New York Institution.—Mr. George R. Hare, M. A., a graduate of Amherst College and of the Normal Department of the National College, has been added to the corps of instruction.

New York Institution for Improved Instruction.—Mr. Greenberger, by order of the Court of Common Pleas of New York, dated August 11, 1892, has changed his name to David Greene.

North Dakota School.—Mr. P. L. Axling, who has filled the position of teacher and instructor in printing for one year, has resigned to accept a similar position in the South Dakota School. Mr. Martin M. Taylor, B. A., a recent graduate of the National College, is appointed his successor. The increased attendance

requiring an additional teacher, Miss Alto M. Lowman, also a recent graduate of the National College, has been appointed. The teaching force now consists of Mr. Taylor, Miss C. M. Halvorson, and Miss Lowman.

Owing to various delays, the new school building, for which money was appropriated nearly two years ago, is not yet completed and probably will not be ready to occupy this year. Mr. Spear writes that "as the walls go up, bringing out the admirable arrangement of rooms and beauty of design, the wisdom of the trustees in selecting Mr. Hanson as the architect for this work becomes more and more manifest."

Ohio Institution.—Col. Stephen Russell Clark, of Delaware, Ohio, has been appointed superintendent. No changes have been made in the corps of instructors.

Oregon School.—Mr. Knight has resigned the position of superintendent. Mr. Benjamin Irving, who has been principal teacher for nearly four years, will now also perform the duties of superintendent.

Miss Winnie Emerson, a graduate of the Iowa School, has been appointed assistant teacher *vice* Mr. Glenn Pierson, resigned.

Pennsylvania Institution.—Miss Fannie Lucas, late a teacher in the Clarke Institution, and Miss Annie M. Jameson, a graduate of the Normal Department of the National College, have been appointed teachers.

Mr. F. W. Booth, Chief Instructor in the Primary Department, and Miss Marion Hendershot, a teacher in the Institution, were married on the 3d of August.

The opening of the term is delayed until the middle of October, in order that school may begin in the new Institution home at Mount Airy. All the new pupils are to be placed at the outset in the Articulation Department.

Portland Day-School.—Miss Merrill, head assistant teacher, has resigned her position to be married. Miss Mary Webb has been appointed a teacher.

South Dakota School.—Mr. H. McP. Hofstater, who has been a teacher in this school for five years, resigned his posi-

tion during July, and his place was filled by the appointment of Mr. Phil. L. Axling, a graduate of this School and late a teacher in the North Dakota School.

Texas School.—Miss Kinney resigned her position as teacher last June to be married, and Mr. W. A. Scott, M. A., a graduate of the Normal Department of the National College, was appointed to the vacancy. Miss Carrie Steagall, of Austin, Texas, who has had experience in kindergarten work, has been added to the corps. She will take a primary class and will practise some of the kindergarten exercises with them.

Virginia Institution.—A considerable amount of work in the way of repairs and improvements has been done during the vacation. This work has improved very materially the sanitary condition of the establishment, and will add much to the comfort of both teachers and pupils.

Western Pennsylvania Institution.—Miss Nannie Orr, who acted as substitute teacher last year, has been appointed teacher in place of Miss Frances G. Camp, who has been advised by her physician to rest a year from work. The industrial school for training girls to do cooking and general housework will be ready for occupancy about the first of January next.

Wisconsin School.—The Rev. Dr. Aaron L. Chapin, ex-President of Beloit College, an instructor in the New York Institution from 1838 to 1843, a trustee of the Wisconsin School from 1865 to 1881, and President of the Board from 1873 to 1881, died July 22, 1892, in his 76th year. He was President of the Ninth Convention of Instructors, held at Columbus, Ohio, in 1878, and always took a warm and active interest in the education of the deaf in general, and in this School especially.

The school has recently met another serious loss in the death of the Hon. Charles Luling, of Manitowoc, who for eleven years had been a member of the Board of Control, during a portion of that time its President, and at all times a staunch friend and wise adviser. He is succeeded by the Hon. J. E. Oliver, of Waupun.

Mr. W. E. Cochrane, who has been connected with this

school for twenty years, and Mr. B. F. Bensted, for seven years, have withdrawn from its service. Mr. Cochrane remains in Delavan and Mr. Bensted has gone to the Kansas School. Mr. E. E. Clippinger, late of the Kansas School, and Mr. J. J. Murphy, both former teachers here, have been appointed teachers, and Miss Bowman, of Kilbourn City, takes the work in the writing and drawing classes which Miss Eva L. Cutler has had. Miss Cutler resigns to prosecute further study in art.

E. A. F.

MISCELLANEOUS.

American Schools.—Mr. E. Erbrich, of Metz, criticising in the *Organ der Taubstummen-Anstalten* for June, 1892, the recent petition of German deaf-mutes to the Emperor (*Annals*, xxxvii, 173), makes the following statement concerning American schools:

If in America the sign-language predominates in the method of instruction, there are special reasons for this which must not be overlooked. The great American institutions are not merely schools but also asylums (*Vermögens-Anstalten*), in which the pupils are not only expected to acquire a certain degree of knowledge but also to learn a trade, which many carry on in the very institutions where they continue to reside. Here, moreover, it is to some extent a question of deaf-mute colonies, and when one no longer perceives that the welfare of the deaf consists in a satisfactory school education, rendering them capable of living and working with and among hearing people, but has in view merely their support, then one may be content with such methods. Instruction is, of course, unnecessary for the intercourse of deaf-mutes with one another.

Mr. Erbrich's article is for the most part able and temperate, but the statement above quoted is entirely erroneous. American schools for the deaf are *not* asylums: the pupils do not continue to reside in them and carry on a trade after their education is finished: there is here no question of deaf-mute colonies: the aim of American schools is, if German schools is to fit their pupils to live and work with and among hearing people.

The World's Congress of Educators.—The World's Congress Auxiliary of the World's Columbian Exposition has published a partial list of the Auxiliary Council of the World's Congress of Educators of the Deaf to be held in Chicago in 1893. It contains the names of twenty-one names, including

America and Europe; additional appointments may be made in the future. A list of the subjects to be discussed at the Congress will soon be published by the Committee on Programme.

The World's Congress of the Deaf.—A World's Congress of the Deaf is to be held at Chicago next summer under the auspices of the World's Congress Auxiliary. It is classed within the department of the committee of which Dr. Gillett is chairman, but on Dr. Gillett's recommendation a special committee of deaf gentlemen, of which Mr. George T. Dougherty, of Chicago, is chairman, has been appointed to make arrangements for the Congress.

Recent Conventions of the Deaf.—Conventions of State associations of the deaf, reunions of alumni, etc., have been held during the past summer in Maryland, Virginia, Pennsylvania, Ohio, Texas, and Hartford. All were largely attended, the proceedings were conducted in due parliamentary order, valuable papers and addresses were given. The largest and most important gathering was that of the New England Gallaudet Association at Hartford, the occasion being the seventy-fifth anniversary of the establishment of the American Asylum. An interesting feature of the Ohio reunion was the contribution by deaf persons present of over \$2,400 for the establishment of a home for the aged and infirm—a proceeding that speaks well alike for the prosperity and the generosity of the graduates of the school.

Full reports of all the conventions above named have been published in the deaf-mute papers.

Congress of German Deaf-Mutes.—The *Blätter für Taubstummenebildung* of June 15 contains a report of the Congress of German Deaf-Mutes held in Hanover, June 5–7, 1892. About 150 delegates were present. The proceedings were conducted partly in the sign-language and partly in speech with accompanying signs. Among the subjects discussed were the condition of the deaf after leaving school, their occupations, the deaf as teachers, the religious privileges of the adult deaf, and methods of instruction.

With respect to occupations, it was deplored that many masters would not employ deaf workmen, and the formation

of colonies where deaf-mutes out of work could be employed was proposed. The importance of industrial instruction at school was urged.

On the subject of deaf teachers there was a difference of opinion. One speaker was in favor of hearing teachers, but others urged that the deaf should be employed, and that a special seminary should be established to train them for that purpose.

"Since very few clergymen can communicate with deaf-mutes," it was voted to petition the Minister of Religion to appoint specially trained clergymen to conduct religious services in the sign-language in each province of the Empire.

The discussion of methods of instruction included the subjects: "Is it meddling if deaf-mutes take part in the contest of German teachers on methods of instruction, and what part shall we take in it?" "the deaf-mute and his language," "the contest concerning articulation and the sign-language," "the deaf-mute's cry of distress," "Heidsiek's views," etc., etc. Some speakers urged the value of speech, others that of the sign-language. It was finally voted that both articulation and the sign-language ought to be taught in schools for the deaf, and that a petition to that effect should be addressed to the German Emperor.

It was decided to send six delegates at the expense of the Association to the World's Congress to be held in Chicago next year.

The German teachers of the deaf had been cordially invited to be present and take part in the Congress, but, except Mr. Heidsiek, who sent a friendly telegram, they held entirely aloof from it. The reporter of the proceedings of the Congress in the *Blätter* expresses regret that this was the case, but the editor, Mr. Walther, says that the German teachers have good reasons of their own for keeping aloof at present from the proceedings of the adult deaf.

President Gallaudet's Glasgow Address.—In the last number of the *Annals* (page 239) we noticed Mr. Farrar's criticism of President Gallaudet's Address. In the July number of the *Quarterly Review of Deaf-Mute Instruction* Mr. J. G. Shaw, of Blackburn, Lancashire, replies to Mr. Farrar with much vigor and force, supporting President Gallaudet's views throughout. He concludes as follows:

We are willing to learn from the oralists, to adopt their methods to a very considerable extent, and to give them the credit of having advanced the cause of deaf-mute education. Indeed, we claim to be oralists ourselves, as ardent as the best of the exclusive oralists; the only thing we object to is the wholesale denunciation and condemnation of manual methods by men who do not and will not understand them. Reasonable oralists like Mr. Farrar admit the value of signs in education, and will grant the deaf-mute liberty to revert to his natural language in adult life; the only question at issue between him and men of Dr. Gallaudet's stamp is where to draw the line, and we agree with him—Dr. Gallaudet agrees with him—that one who is a *master* “will know by the teaching of experience where to draw the line.” The master must be no faddist, no fanatic, no blind theorist. He must face manfully the difficulties of his profession and not strive to throw dust in the eyes of the public by blatant boasts of what can only be done under exceptional circumstances. He must take into consideration the natural qualifications and disqualifications of each individual pupil, the length of each pupil's probable school term, and his prospect of keeping up speech in after life. If men like Mr. Farrar would only shake themselves free from theorists who profess to work miracles, and overcome their ill-founded objections to the finger and sign language, which we who know it and use it believe to be absolutely indispensable, then the best oralists and the most thoughtful men of the combined school can join hands and work amicably together for the benefit of the class whose welfare we all have at heart. Let us secure the “greatest good to the greatest number,” and combine into one national or international system the best features of all well-tried methods of instruction.

The Verrier Audigène.—Mr. N. Weissweiler, Director of the Cologne Institution, in the *Blätter für Taubstummenbildung* of August 15, 1892, gives the results of a series of thorough tests recently made with the Verrier *audigène* in the Cologne Institution. They agree with the results of the tests made by Professor Gordon at Washington (*Annals*, xxxvii, 238), rather than with those previously reported. Mr. Weissweiler finds the *audigène* no more powerful than various other hearing tubes which are simpler in construction, less expensive in cost, and more convenient in use. Mr. F. Haller, of the Gerlachsheim, Baden, School, in the *Organ der Taubstummen-Anstalten* for August, 1892, expresses virtually the same opinion as Mr. Weissweiler.

Abusive Language by Signs.—The Belfast *News-Letter* of July 29, 1892, in its report of the Armagh Petty Sessions, describes the case of Anne Slavin *vs.* Bella McArthur for abu-

sive language. The complainant testified that the defendant had shaken her and had said she would pull the heart out of her. The lawyer who appeared for the defence put in the plea that his client was a "dummy." A magistrate—"Is she a dumb person?" Complainant—"She is." (Laughter.) Another magistrate—"How did she tell you that she would pull the heart out of you?" Complainant—"She signed me that she would do it." The magistrates dismissed the case, saying that the complainant should have brought a summons for assault instead of for abusive language.

The *News-Letter*, commenting editorially on this case, makes the following foolish remarks:

The possibility of abusive language being made use of by a person who is deprived of the power of speech may be entertained by some persons, but they are not numerous. That a bench of magistrates should come to the conclusion that a mute cannot be guilty of slander is in keeping with experience and common sense. A decision to this effect was pronounced at the Armagh Petty Sessions yesterday, where a female plaintiff appeared against a defendant of the same sex for defamation of character. The defendant was a deaf-mute, and her opponent stated that she had conveyed her meaning by signs. The bench held that signs could not be made the basis of an action, unless, we suppose, they are the sky signs that the London County Council complain of, or those signs that project over the footway, so as to be dangerous to pedestrians. Slander by signs may appear offensive, but its power of doing evil is necessarily limited, for while some signs might appear distinctly hurtful to a sensitive soul, the same might be interpreted in a highly complimentary sense by another. For instance, there is a race who greet one another by pulling noses. Among others, however, such an action would be construed as an insult. Thus it is that no universal code of signs could be framed. We have heard of songs without words, but never of unuttered slander.

An Austrian Periodical.—An association of Austrian teachers of the deaf was formed last year, and the publication of a monthly periodical entitled *Mittheilungen des Vereines österreichischer Taubstummenlehrer* (Communications of the Union of Austrian Teachers of Deaf-Mutes) was begun in March last. The editor is Mr. Karl Fink, Director of the Royal Imperial Institution; the subscription price for countries other than Austria, 7 marks a year. Address IV Bez., Favoritenstrasse 13, Vienna, Austria.

E. A. F.

